

FINANCIAL TIMES

Cross-currency loans cut cost of borrowing, Page 19

EUROPE'S BUSINESS NEWSPAPER

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Table with exchange rates for various countries including Australia, Belgium, Canada, Denmark, Egypt, Finland, France, Germany, Greece, Hong Kong, India, Indonesia, Italy, Japan, Korea, Kuwait, Lebanon, Libya, Luxembourg, Malaysia, Mexico, New Zealand, Norway, Pakistan, Portugal, Singapore, Spain, Sri Lanka, Sweden, Switzerland, Taiwan, Thailand, Turkey, U.A.E., and U.S.A.

NEWS SUMMARY

GENERAL

Protests grow at French steel plan

Steelworkers in the Lorraine region yesterday blocked the Paris-Luxembourg railway line and raided the local Socialist Party headquarters at Metz, as French Government plans to restructure the industry...

Cable TV 'may fail'

Multi-channel cable TV may be a commercial failure in Western Europe unless government policies change radically to allow cheaper systems and restrict the industry...

Chilean reshuffle

Chilean Finance Minister Carlos Casaravalle lost his job in a reshuffle of Geo Augusto Pinochet's economic team...

Punjab tension grows

India's four northern states face disruption and the risk of violence today following the killing of a leading opposition party leader in the Punjab...

Poles urged to vote

Polish authorities began a big campaign to counter opposition efforts to encourage a mass boycott of local elections in June...

Hong Kong hopes

China believes it will agree with Britain on the future of Hong Kong by September, Foreign Minister Wu Xueqian said...

Swazi coup foiled

Swaziland said an attempted coup by a "gang of four" - two Cabinet ministers, an MP and a royal prince - had been foiled...

Bolivian deal

Vice-President Jaime Paz Zamora's party was expected to return to Bolivia's coalition government after being offered four Cabinet posts...

Cyprus peace plan

Washington and Moscow are both backing a UN compromise peace formula to reduce Greek-Turkish tension on Cyprus...

U.S. Unesco probe

Four U.S. investigators began an inquiry into claims of financial mismanagement and personnel malpractice at Unesco, which could influence other western countries to follow the U.S. out of the organisation...

Apartheid anger

Coloured (mixed-race) Peruvian soccer player Augusto Palacios, who went to work in South Africa this year, said he would leave because he has been banned from living in the same house as his white wife...

Jerusalem raid may signal shift in guerrilla tactics

BY DAVID LENNON IN TEL AVIV

ISRAEL is braced for a new wave of guerrilla attacks following the unprecedented shoot-out in central Jerusalem yesterday between Arab guerrillas and Israeli-civilians and police...



Mr Yitzhak Shamir

One guerrilla was reported killed and at least 48 Israelis injured, with a number of fatalities feared. Two guerrillas were taken captive after the furious gunfight which involved shopkeepers, passers-by and police...

This is an entirely new type of attack, which has heightened fears that Palestinian guerrillas will adopt a far more aggressive and daring style in future attempts to force Israel to recognise the national rights of the dispossessed Palestinian people...

There has been a gradual build-up of bombings in Jerusalem in recent months. These are apparently the work of the radical Palestinian groups frustrated by the failure of the relatively more moderate, political efforts of Mr Yasser Arafat, Palestine Liberation Organization (PLO) chairman, to achieve some progress on the issue of Palestinian rights...

other was captured while trying to drive through a road block on the road to Bethlehem. Police described the shoot-out as "a new type of attack which we have not encountered before..."

Mr Yitzhak Shamir, the Prime Minister, warned that those who perpetrated the attack and those who sent the attackers would be punished. He said that while most of the attempted guerrilla attacks in recent times had been unsuccessful, yesterday's raiders had managed to kill, cut down and massacre Israelis...

Despite the shock which the raid delivered to the Israelis it may well prove to have been a failure from the planner's point of view. If the Democratic Front for the Liberation of Palestine, which claimed responsibility for the attack, is to be believed then the aim was to capture the nearby Tourism Ministry building and to take hostages...

In a statement issued from Damascus, the group headed by Mr Naif Hawatmeh, claimed that the guerrillas had taken hostages in the Tourism Ministry and were demanding the release of Palestinians held prisoner in Israeli jails. However, it would appear that this plan went awry and that the guerrillas opted for a shoot-out in the busy city centre...

Queen Elizabeth, who has just completed a state visit to Jordan, has been invited to visit Israel, the Israeli Embassy in London announced yesterday. The invitation was extended by Mr Chaim Herzog, the Israeli President, during a luncheon with the Queen yesterday at Windsor Castle. Mr Herzog is this week on an official visit to the UK...

Volvo opens construction merger talks

BY KEVIN DONE IN STOCKHOLM AND TERRY DODSWORTH IN NEW YORK

VOLVO OF Sweden and Clark Michigan, the respective subsidiaries of the U.S. have opened negotiations that might lead to the merger of their construction equipment operations...

An eventual merger would create an important new force in the world construction equipment industry, capable of challenging in the wheeled loader and dump truck sectors the two giants, Caterpillar of the U.S. and Komatsu of Japan...

Another big competitor in these sectors is Fiat Allis, a joint venture of Fiat of Italy, which has a 99 per cent interest, and Allis Chalmers of the U.S. The combined annual turnover of the Clark and Volvo construction businesses would be about \$717m...

This is the kind of consolidation that industry observers have been expecting for some time because of the long and deep depression in the markets for most construction equipment...

IBH Holdings of West Germany attempted in the early 1980s to build a large international competitive group, but it took over mainly weak companies and ultimately disintegrated last November...

By contrast, Volvo and Clark are both financially healthy. "This project is not coming because of weakness but because both are ready to be offensive and aggressive in the world market," Volvo said yesterday...

As a first step, Volvo BM and Clark Michigan, the respective subsidiaries of the U.S. have opened negotiations that might lead to the merger of their construction equipment operations...

Madrid to buy Roland missile

By David White in Madrid

SPAIN HAS decided to buy the Franco-German Roland anti-aircraft missile in preference to British Aerospace's Rapier, in a deal worth Ptas 30m (\$201m)...

The Gibraltar issue, on which little progress has been made in recent Anglo-Spanish talks, was one factor behind the choice, according to both Spanish and British officials...

The contract decision, which the British embassy in Madrid described as "very disappointing", was made yesterday by Sr Felipe Gonzalez, the Spanish Prime Minister, following the passing of deadlines on the rival bids on Saturday...

The deal is linked to important co-production and technology offsets and is designed to enable Spain to develop its own missile system...

The missile contract, which has been under discussion for several years, is the second recent setback for British hopes of breaking into the Spanish defence market...

The McDonnell Douglas F/A-16 Hornet to replace Spain's ageing generation of U.S. and French fighters, rather than the Anglo-German-Italian Tornado...

The Roland and Rapier emerged as the main contenders for Spain's low-level air defence system, against the Chaparral manufactured by Ford Aerospace of the U.S. and a recent bid by the Italian Aspid missile...

Britain had maintained hopes of clinching the deal, and made no preconditions on deployment of the missiles, some of which are due to be stationed in the Gibraltar region...

Alfonsin rejects austerity as debt rescue condition

BY JIMMY BURNS IN BUENOS AIRES

PRESIDENT Raul Alfonsin has again warned that Argentina will not be forced into a fierce programme of retrenchment as a condition for the renegotiation of its \$43.6bn foreign debt...

There are those who believe that we can only pay the debt by postponing growth and sacrificing the general welfare of our people. We think exactly the opposite," Sr Alfonsin said in a nationwide broadcast...

The President reiterated a pledge that Argentina would not repudiate on its debt. But his tough defence of "Argentine interests and the dignity of the nation" appeared to point a continuing difficult period ahead for creditors in their dealings with Buenos Aires...

Both the U.S. Government and Western banks had hoped that the \$500m rescue package agreed at the weekend as a way of solving the immediate problem of the interest payments owed to U.S. banks, would lead to early signature of an IMF stabilisation plan...

Sr Alfonsin did not mention the IMF. On the contrary, the main thrust of his speech appeared to be aimed at stressing the degree of Latin American co-operation involved in the package and the way in which Argentina considered itself to have emerged strengthened by the last-minute concessions granted by its creditors...

"We know that from now onwards we are not alone and this is a fundamental change in a situation in which we were previously isolated and vulnerable," Sr Alfonsin said...

The President implicitly ruled out a debtors' club by saying that the deal reflected a spirit of co-operation rather than confrontation. But local analysts interpreted his speech as a firm indication that Argentina still expects considerable flexibility from the IMF as well as better terms from the banks once it negotiates a broader package...

David Gardner in Mexico City adds: Officials have confirmed that Mexico's \$100m portion of the emergency credit for Argentina could be repaid in grain shipments. This, however, is a fall-back position. The current plan is that the credit should be repaid out of the \$200m bridging finance the U.S. Treasury is committed to provide once Argentina signs a letter of intent, with the IMF...

Should there be major obstacles to a deal with the IMF, the Mexican credit would become pre-payment, for grain, which Mexico is importing from Argentina this year for the first time. Contracts worth \$136m have already been agreed but the form of payment - including a possible barter agreement - is due to be decided in the course of President Miguel de la Madrid's visit to Argentina, which was due to begin last night...

IMF confirms industrial recovery, Page 6; Lex, Page 18

Olivetti plans retail network for Europe

BY OUR MILAN CORRESPONDENT

OLIVETTI, Europe's leading data processing equipment company, is planning to set up a network of retail outlets in Europe, specialising in the sale of Olivetti personal computers and related software...

Sig Piniol, Olivetti's joint managing director in charge of Olivetti's strategy, said that, although it was not clear whether the retail stores would be wholly owned or joint ventures, Olivetti would in a few months announce its plans to open such outlets "in several countries in Europe..."

Olivetti has a 49 per cent stake in a chain of 60 personal computer shops in the U.S., which trade under the name of Microage. This venture, which Olivetti entered in late 1982, plans to have between 100 and 120 outlets operating by the end of this year...

In Europe, Olivetti products - from typewriters to calculators - are sold in a number of outlets, many in Italy. But the idea of an Olivetti-operated retail chain in Europe for computers is new, and Sig Piniol explained that it was part of the group's expansion plans...

Sig Piniol said he was "strongly convinced" that Olivetti could attain a lasting position as the second largest personal computer manufacturer in Europe. "We take it for granted that IBM will lead the market," he added...

Olivetti announced a new line of personal computers in London last week and is continuing to co-operate with AT&T, which last December paid \$280m for a 25 per cent stake in Olivetti. Olivetti is selling around 100,000 "workstations" to AT&T this year for \$250m. They will be marketed by AT&T in the U.S. market...

Olivetti said yesterday that it had signed a \$4.5m agreement with Yugoslavia for industrial and commercial co-operation in making office furniture. The deal calls for an exchange of products over the next five years...

Ford of Europe chief quits

By Kenneth Gooding in London

FORD OF Europe chairman Mr Edward Blanch resigned unexpectedly yesterday in a move that took his colleagues by surprise...

Mr James Capolongo, president, is to co-ordinate all Ford of Europe matters for the time being...

The indications are that the current group will appoint a new chairman to replace Mr Blanch, who was 58 last month and has worked for Ford for 32 years...

He began his Ford career as a financial analyst and was elected a vice-president of the company in 1973. He became president of Ford of Europe in 1979 and succeeded Mr Bob Lutz as chairman, Ford of Europe, in August 1982...

Ford said last night that Mr Blanch "will remain with the company as a corporate vice-president until the end of the year to complete specific business studies related to international markets..."

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Table with sections: Europe, America, Overseas, World Trade, Britain, Agriculture, Arts - Reviews, Commodities, Crossword, Currencies, Editorial comment.

Table with sections: EEC agriculture: the road to reform, UK clearing bank union: the radical enters, French Communists: to quit or not to quit, China: tightening grip on foreign trade, Technology: hopes for laser healing power.

Table with sections: Motorcycle industry: BMW bucks the trend, U.S.: loan swap experts cut borrowing costs, Editorial comment: Zimbabwe; UK taxation, Lex: Reuter; Argentina's debt; Kleinwort Benson, Nonwoven Fibres: Survey, Section IV.

EUROPEAN NEWS

Pan Am pulls out of Afghan line

BY LESLIE COLITT IN BERLIN

PAN AM has relinquished a 49 per cent share in Ariana Afghan Airlines, which it helped to create. The move followed cancellation last year by Ariana of contracts with Pan Am and McDonnell Douglas to provide crew training for the airline's Boeing 727-100s and DC10-30s and is a direct result of the Soviet occupation of Afghanistan.

West Germany's Lufthansa airline and Swissair have taken over the refresher training of Afghan pilots under contracts signed last year.

A Swissair spokesman said its contract to provide up to 10 Afghan pilots with 100 hours of simulated training annually for the DC10 is expected to be automatically extended for another year. Lufthansa too said it is giving 100 hours of training this year to Afghan pilots of the Boeing 727s.

The refusal by the U.S. Administration to give visas to Afghan pilots last year is understood to have caused Pan Am to cancel its contract with McDonnell Douglas. The DC10 owned by Ariana is claimed to be a favourite with the Soviet military on the Moscow-Kabul route as it is an all-freight version.

Weinberger pledge on Turkey aid

BY DAVID BARCHARD IN CESME, TURKEY

PRESIDENT Ronald Reagan's administration yesterday promised Turkey to do its best to persuade the U.S. Congress to withdraw a decision by the Senate Foreign Relations Committee last week to block \$275m aid package for next year unless the Famagusta new town of Varosha in Cyprus is handed back to the Greek Cypriots.

The decision, taken last week by an 11-7 majority, has been bitterly resented by Turkey. The vote followed the unilateral declaration of independence last November by the Turkish Cypriots in the northern sector of the island.

Mr Caspar Weinberger, the U.S. Secretary of Defence, who is here for the Nato Nuclear Planning Group meeting today and tomorrow, met his Turkish counterpart, Mr Zeki Yavuzturk, for about an hour yesterday morning.

According to officials, the two men concentrated almost entirely on the aid question. The U.S. Defence Secretary is understood to have repeated that the Reagan Administration deplores the proposed cuts and will do its best to have them revoked. He warned, however, that the struggle might be long and hard.

Mr Yavuzturk, according to Turkish officials, repeated Ankara's view that U.S. military aid is given because of Turkey's contribution to the overall Western defence effort and that it should not be linked to extraneous issues such as Cyprus. In the Turkish view, U.S. aid is unconditional except as stipulated in the 1980 defence agreement with Washington.

U.S. officials here are still sanguine about the chances of having the aid cut reversed.

Moscow to push for UN Cyprus plan

BY ANDRIANA IERODIACONOU IN ATHENS

THE SOVIET Union is to advise Turkey to accept the latest United Nations compromise peace formula for Cyprus, senior Cypriot Government officials in Nicosia said yesterday. The UN formula is also backed by Washington, which hopes to reduce Greek-Turkish tension in Nato through progress on the Cyprus issue.

The Soviets are understood to have disclosed their intentions during a five-day visit to Moscow last week by Mr Andreas Christofides, the Cypriot government spokesman. Soviet Foreign Ministry officials reportedly said they will advise Turkey to accept the UN proposal through the Soviet embassy in Ankara and the Turkish embassy in Moscow.

Moscow has not been actively involved in the Cyprus issue since 1975, when it proposed an international conference to settle the problems of the divided eastern Mediterranean island. Turkey dispatched troops to Cyprus, which has an 18 per cent Turkish-Cypriot minority, in 1974 after a coup organised by the Greek military junta against the Makarios Government.

The Soviet proposal was opposed by the West. But it became a part of the Cypriot Government's policy of "internationalising" the Cyprus issue. This meant raising the issue before international organisations and conferences in the hope of generating support to end the Turkish military occupation of the northern third of Cyprus.

The latest UN peace proposals, which were presented by Sr Javier Perez de Cuellar, the UN Secretary General, to the Greek Cypriots and Turkish Cypriots in March, reportedly call on the Cypriot Government to abandon internationalisation.

But at the same time they require the Turkish Cypriots to stop the implementation of last November's declaration of an independent state in the occupied north of Cyprus.

The independence move revived speculation on the "double enosis" scenario for Cyprus - the permanent partition of the island into two zones, one controlled by Turkey and the other by Greece.

The Soviet Union is understood to be opposed to such an arrangement, which would effectively mean the control of Cyprus by two Nato powers.

● Egypt and Cyprus agreed today to restore diplomatic relations severed in 1978, Reuter reports from Cairo.

Mr George Lacomou, Cyprus Foreign Minister, told reporters after a meeting with Egyptian President Hosni Mubarak: "We have agreed in principle to re-establish diplomatic relations in the very near future."

He said the decision reflected "the close good relations that traditionally exist between our two peoples."

Diplomatic ties were broken in 1978 after the killing in Nicosia of prominent Egyptian writer Mr Youssef Sebai by two Palestinians.

Double or quits choice looms for French Communists

BY PAUL BETTS IN PARIS

WILL THE Communists leave the Government this time? This has been the main question on the front pages and the television news, the main focus of every political conversation since the Mitterrand Government announced its tough steel industry restructuring plan last week. The independent left-wing daily "Liberation" put it succinctly yesterday: "The Communists, it's double or quits."

Ever since the Communists joined the Socialists as the junior member of the French left-wing governing coalition, the question of their departure from Government has regularly come up. This time, however, most political observers agree that the steel plan, involving up to 25,000 layoffs between now and 1987, has put the Communists on the spot.

M Georges Marchais, the Communist secretary general, has called the steel plan "a tragic error" and has urged steelworkers in the depressed Eastern steel region of Lorraine to fight it. He has also asked the Government to reconsider the restructuring programme.

However, M Marchais has carefully avoided speaking about the Communists pulling out of the Government so far. The party has adopted an extremely cautious approach, limiting its attacks to the steel plan. But the Communists are clearly in an extremely delicate situation. They have already had to swallow plans for large-scale layoffs in the coal and car industries. Since the left has come to power in France, the country has had to accept unpopular austerity measures.

Unemployment has continued to increase, and the Communists have been big losers in local elections. Moreover, they have had to put up with President Francois Mitterrand's firm stand in favour of the deployment of new U.S. nuclear missiles in Europe and his opposition to the European peace movement.



COMMUNIST RIVAL: Mr Charles Fiterman (above) and M Georges Marchais. A split from the coalition could throw the party into chaos.



Criticisms

In recent weeks, the Communists have sharpened their criticisms of government policy, especially in the industrial sector. But these criticisms have always been followed by statements expressing the party's commitment to the coalition. It has been a strategy of one foot in the Government and one out to try to make the biggest political capital possible out of the left-wing alliance. This strategy has annoyed the Socialists and on several occasions M Pierre Mauroy, the Prime Minister, and President Mitterrand himself, have expressed openly their irritation.

The Communists are fully aware they have more to lose than to gain from leaving the Government. Without the Communists, the Socialists would still continue to have a comfortable parliamentary majority. The Communists, on the other hand, would lose all the advantages of being a part of the Government with four Ministers and the ability to place their people in key administration jobs both at national and local levels.

Political losers

Although President Mitterrand is clearly expecting a growing backlash from the Communists, he is also calculating that in the end the big political losers can only be the junior members of the coalition. The Communists are expected to win about 12 per cent of the French vote in next June's European and legislative elections, according to the latest opinion polls. Should they go below 10 per cent, they would be in serious political trouble.

President Mitterrand has another important card up his sleeve. He has announced he intends to visit Moscow this year to meet Mr Konstantine Chernenko, the new Soviet leader. M Marchais was reported to have been on good terms with Mr Andropov, the late Soviet leader, but his relations with Mr Chernenko are said to be much cooler. An eventual visit to Moscow by President Mitterrand at a time when the Socialist President has said he wants to maintain an dialogue with the Soviet Union could thus limit M Marchais's room to manoeuvre.

Steady decline

What makes matters even more difficult for the Communists is that the party is involved in a long internal debate about its future and future leadership. Under M Marchais, the party has been steadily declining, but he is trying to hold on to his position.

In recent months, he has attacked and sought to undermine his main rival and former protégé, M Charles Fiterman, the Transport Minister. M Fiterman backed by the party's younger technocrats, has proved a competent member of the French Government. For most, that is the leading candidate to succeed M Marchais as Secretary-General at the next party congress due to be held in the spring of next year.

A decision to leave the Government is therefore bound to have major internal party repercussions. What is more, neither M Marchais's camp nor the Fiterman faction favour pulling out of the Government at this stage, although M Fiter-

Pressure grows in Dutch cabinet for extra cuts

BY WALTER ELLIS IN AMSTERDAM

THE DUTCH coalition Government has begun fighting an internal battle on two fronts, and its long-term survival is far from guaranteed.

Last week, the hardest pressure was being applied on the nuclear weapons front, as the U.S. sought to persuade the Dutch to accept cruise missile deployment, and the Soviet Union to persuade them to reject it.

This week, the economic battle is heating up. Mr Onno Ruding, the Christian Democrat Finance Minister, has been joined by Liberal members of the cabinet in demanding record spending cuts next year. Other Christian Democrat ministers, however, are opposed to any enlargement in the scale of proposed cuts beyond the F1.7bn (£1.6bn) agreed when the coalition was formed in 1982.

Mr Ruid Lubbers, the Prime Minister, and himself a Christian Democrat, is caught between the two. He is aware of the need to continue cost-cutting. He also knows that Mr Ruding's plan for an additional F1.5bn in cuts next year will be extremely unpopular in the country and could cause grave electoral problems for the coalition.

The Liberals, who are generally much tougher than their cabinet partners on economic matters, did not accept Mr Ruding's line without question.

Mr Ruding's argument for F1.10bn is that, without it, the Government will not achieve its key target of a public sector borrowing requirement by 1987 of 7.4 per cent of net national income.

The Planning Bureau's most recent report, published just over a week ago after considerable delay, contends that the 7.4 per cent deficit target is out of reach and that, partly as a result of government strategy, unemployment in the Netherlands is going to exceed 12m by 1987—that is, nearly 20 per cent of the workforce.

The cabinet's problem arises from the fact that reductions in public expenditure have proved difficult to sustain. A hatch of social welfare cuts which was to have taken effect in July has been postponed, and a 3 per cent drop in public sector wages was only introduced in January and down the country. New talks with the public sector unions on further cuts for 1985 and 1986 have broken down, and once again there is a hint of grasping at the air.

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EUROPEAN NEWS

Threat of labour conflict grows in Sweden

BY KEVIN DONE, NORDIC CORRESPONDENT IN STOCKHOLM

THE RISK of widespread conflict in the Swedish labour market grew yesterday as leaders of the country's blue-collar workers warned that sympathy actions in support of workers in low-paid sectors unable to push through wage settlements alone.

At the same time in the public sector, where most settlements have been completed, the union representing academic and professional employees has warned that it intends to call 10,000 teachers, prosecutors and other senior civil servants out

on strike from next Monday in support of a pay claim for senior teachers. The state employment agency replied yesterday with a more far-reaching threat to lock out 23,000 teachers at senior schools and the universities together with a further 1,800 state employees from next Tuesday. The conflict could still be delayed by some form of mediation, but if it goes ahead it could lead to more than 500,000 pupils and students being without teachers.

So far, this year's wage round has concentrated on the success of the public sector unions and

some of the biggest unions operating in the private sector in pushing through wage deals which clearly threatened the Government's economic strategy. This is aiming to reduce Sweden's inflation and maintain the country's competitiveness in foreign markets.

This strategy is vitally dependent on moderate wage settlements. The Government had earlier warned that total labour costs could not be allowed to rise by more than 6 per cent if it was to meet its target of reducing inflation to only 4 per cent by the end of the year. Mr Olof Palme, the Prime

Minister, warned at the weekend that the Government was not giving up its fight against inflation. Economic policy would be tightened if it was shown that inflationary wage settlements threaten economic targets.

The main threats to labour peace are emerging in the lower paid areas, such as retailing and the clothing and textiles industry, where workers are finding it impossible to push through settlements as high as those achieved in sectors such as engineering and building. Despite a long tradition of

centralised wage bargaining in Sweden, the employers have managed to gain negotiations sector by sector this year. Leaders of LO, the blue collar workers' trade union confederation warned yesterday, however, that the more powerful unions would not allow the low paid sectors to be pushed aside.

The first test of strength is likely to come in the retailing sector where wage negotiations have already broken down. Union leaders were meeting last night to consider a call for strike action and sympathy actions from other sectors such as the transport workers.

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To: The Development Office, Scottish Borders, P.O. Box 25, MELROSE. OR TELEPHONE GILLIAN REDFERN in London, at 01-579 4777. I'm far too hard-headed to take your word for it. But I'm open-minded enough to come to Cockspur Street to have a look for myself. I'd like to come on Wednesday April 11th  Thursday April 12th  at ..... a.m./..... p.m. (please indicate approximate time) Name ..... Position ..... Company ..... Address ..... Tel. no. ....



BREAKAWAY TO A GREAT WAY OF LIFE.

Ireland will use price controls to curb wages

By Brendan Keenan in Dublin

THE IRISH Government is to use the country's price controls mechanism to try to enforce the seven-month pay freeze this year, despite the lack of success of such methods in the past.

The Government's aim is to bring Irish inflation down from the present 9 per cent to 5 per cent next year. It wants the pay freeze to be followed by increases of less than 5 per cent over the following 12 months.

The Government has already said it will not give public-sector workers a pay rise this year. It now says the Prices Commission, which controls the price of most goods in Ireland, will not allow increases based on pay rises conceded within seven months of the expiry of the last wage agreement.

Union leaders reacted angrily to the plan, describing it as "interference in the process of free collective bargaining." Mr John Carroll, president of the Irish Congress of Trades Unions, said he would recommend withdrawal of union representatives from the Prices Commission if it was used to enforce pay restraint.

EEC seeks united stand on IDA funding

BY JOHN WYLES IN LUXEMBOURG

NINE OUT of ten finance ministers of the European Community agreed yesterday to try to sidestep the U.S. refusal to increase funds available to the International Development Agency for helping the world's poorest nations.

West Germany will continue to ponder its position until the middle of next week, but other ministers stressed the importance of a united EEC position at the next meeting in Washington on April 13 of the International Monetary Fund's development committee.

It is hoped that the Ten will agree to suggestions supported by the IDA for a supplementary fund available for lending in

(£2,060bn). This would have the effect of raising the IDA's total available for lending in the Third World from \$9bn to \$12bn.

The U.S. has agreed to contribute only on the basis of a \$9bn fund and, as yet, Japan is said to be reluctant to pay into a special supplementary fund.

Mr Nigel Lawson, Britain's Chancellor of the Exchequer, said yesterday that he and his colleagues hoped that a united Community position—assuming West German support—would have some impact on Japan's approach. EEC ministers considered the ceiling the U.S. is trying to impose as "inadequate and a matter for regret," added

The total value of duty-free goods which travellers may take from one EEC country to another will be raised on July 1 from Ecu 210 (£121) to Ecu 250 (£162). The cigarettes and alcohol allowances, however, will remain unchanged until 1987.

Mr Lawson. He doubted whether there would be a change in the U.S. position.

Ministers also agreed to the statement to be made on behalf of the ten at the IMF Interim Committee meeting in Washington on April 12 by M Jacques Delors, the French Finance

Minister and current president of the Council of Finance Ministers.

This will not contain any great surprises and M Delors conceded yesterday that there was still no common EEC position in support of his view of the need for a "modest" new issue of special drawing rights.

Two hours of lunch was also devoted to a review of the deadlocked negotiations on the British budget problem. Mr Lawson said afterwards that the "amicable" discussion had revealed general support for the complex system for cutting Britain's payments to the EEC budget which was discussed by foreign ministers last week.

Insurance group yields to competition rules

BY PAUL CHESBROUGH IN BRUSSELS

EUROPEAN COMMUNITY competition rules have been formally applied to the insurance sector for the first time. The European Commission has imposed on a consortium of Italian insurers, Nuovo Cegam, a system of independent premium fixing.

After changing its rules to permit each of the 15 companies involved in the consortium to fix its own premium levels, the consortium is being granted a 10-year exemption from the general principle in the Treaty of Rome against companies con-

cerning their activities. The European Commission, which administers Community competition rules, yesterday announced that it was dropping legal proceedings.

The case is the first of several in the insurance sector on which the Commission will be ruling over the next few months. The pending case nearest to decision concerns fire insurance in West Germany.

Commission officials see freedom to set premiums and freedom of access to the market as the two main obstacles to an

open insurance market.

The Italian action, and the others which will follow, are therefore the legal concomitant to the political problem of ensuring open access.

Both the British Government and the Commission have consistently urged the dropping of restrictions which hinder an insurance company from one country starting operations in another within the EEC.

Although the Treaty of Rome provides for companies to establish insurance operations any-

where in the EEC, the application of the general principle has been blurred by the right of governments to settle the conditions for operation. Hence, the struggle in which the UK and the Commission have engaged at the Council of Ministers in recent years.

Commission policy on premiums, as expressed in the Nuovo Cegam case, is that there is no objection to companies sharing technical knowledge on risk-taking, for example, but they must be free to set their own premiums.

Soviets to use more raw gas

By David Buchan, East Europe Correspondent, in London

THE SOVIET Union has decided to use more of its huge gas reserves as feedstock for chemical product exports rather than try to sell additional amounts of raw gas in Western Europe where there is little demand for it, an official has indicated.

Mr Vladimir Filanovsky, head of the oil and gas department at the State Planning Committee (Gosplan), said in a recent Tass interview that the Government was taking the advice of specialists "who suggest that natural gas deliveries abroad should not be expanded."

The implication of Mr Filanovsky's comment was that the Soviet Union had decided not to pursue the idea of building a second trans-Siberian gas pipeline, originally scheduled during the 1986-90 Soviet plan.

The present weak demand in Western Europe has left Moscow with orders of some 28bn cubic metres (bcm) a year.

Nuclear plant pact for Czechs and Austrians

VIENNA—Czechoslovakia and Austria have decided to begin implementing cross-border co-operation this year to deal with any future accidents at their nuclear power stations.

The agreement, originally drafted in 1982 in Vienna, will become effective on June 1, the two sides announced at the weekend. The arrangement is the first of its kind between a Communist bloc state and one in West Europe.

The move follows talks last week between Czechoslovak officials and Herr Erwin Lang, Austrian Foreign Minister, in Prague.

Each side will be committed to enforce similar laws at home on radiation safety standards and to exchange information on the development of their nuclear programmes.

It will also expand existing contractual ties between the two countries, Czechoslovak sources said. Austria is heavily dependent on its East European neighbours — Czechoslovakia among them — for fuel and electricity supplies.

The agreement also provides a basis for co-operation to solve or help solve unexpected problems at Czechoslovak and Austrian nuclear installations, the sources said.

The plan to implement the agreement follows allegations by both countries that each is causing pollution problems in the other, and concern in Vienna that Czechoslovak nuclear plants are too close to Austrian territory.

Czechoslovakia will soon have four big nuclear power plants near the Austrian frontier. A 440 MW, Soviet-designed station already operates at Bohumice, 55 km inside Czechoslovakia.

Another is under construction at Dukovany, 35 km from the border, and two more plants close to the border are on the drawing board. Czechoslovakia aims to produce one-third of its electricity needs from nuclear power by 1990.

Austria has only one nuclear power station, at Zwentendorf, 48 km north-west of Vienna. Reuter

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OVERSEAS NEWS

# Zimbabwe makes a hard, inevitable economic choice

BY TONY HAWKINS IN HARARE

WHEN Dr Bernard Chidzero, Zimbabwe's Finance Minister, last week announced sweeping new exchange control measures, including a temporary embargo on the remittance abroad of profits and dividends, he was playing his second last card in the crucial battle to save foreign exchange.

The measures are designed to save \$240m (£150m) annually. They have been made necessary because of the country's need to spend at least \$625m on food imports over the next year following the failure of the drought-stricken maize crop.

All but one of Dr Chidzero's foreign exchange saving options have already been exhausted.

He cannot turn to foreign borrowing for the time being. Public sector debt has increased from \$240m at the time of independence four years ago, to \$2.5bn last year. The debt-service ratio has risen from less than 2 per cent of export earnings to more than 65 per cent.

Import allocations to industry this year are below their pre-independence 1979 levels and, in real terms, some 60 per cent lower than their 1981 peak.

The savage quota reductions will have far-reaching ramifications for the economy in the form of lower output, employment and even exports.

The devaluation card was played at the end of 1982 when the Zimbabwe dollar was devalued by 20 per cent and allowed to float down a further 10 per cent later.

Having exhausted these

Barlow Rand and Gold Fields of South Africa, were bought, Mrs Mann said, before she left the country in 1978. She claimed in an affidavit that on hearing of the Zimbabwe Government's plans she asked for the share certificates and transfer forms to be delivered to her. Grindlays replied that under the new regulations it was unable to comply with her request.

Acting Justice Louis Weyers granted an interim injunction until May 29 preventing 19 South African and four Zimbabwean companies from transferring Mrs Mann's shares.

The Minister's measures are designed to save \$2180m this year by temporarily curbing invisible outflows, but public sector debt-servicing costs estimated at \$2375m there will still be a current account deficit of at least \$250m.

This would be higher than last year's estimated \$2450m deficit, so that last week's tightening up on invisibles is no solution in itself.

Dr Chidzero's strategy is based on the belief that export

promotion policies should increasingly bear fruit over the next two years as world trade regains momentum, while after three successive drought years, agricultural output, especially grain production, should recover strongly in 1985.

Unfortunately, the neat equation of the \$2240m annual savings on invisibles with a roughly equivalent spending on food imports for 1984-85 is being allowed to distract attention from the continuing underlying deficit on the current account.

A prime cause of that imbalance is the running budget deficit, estimated this year at \$2717m. It is this Government overspending and underfunding that is the cause of the problem, yet the Minister has been forced to focus his attention on private sector outflows.

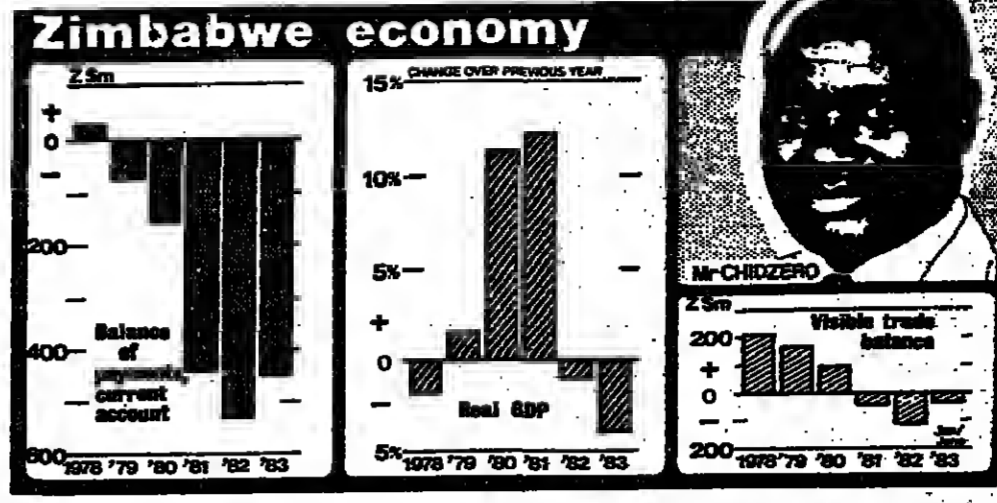
It has already been Dr Chidzero's unhappy lot to have to increase substantially tax levels to the point where last year he plaintively described Zimbabwe as "one of the most highly-taxed countries in the world." Despite these high taxes, however, the budget deficit remains obstinately large.

The explanation lies in excessive levels of recurrent spending on defence (15 per cent of the total budget), education (18 per cent) and domestic debt service (19 per cent). These three absorb more than half total expenditure.

In the first two years of independence real GDP surged

an impressive 28 per cent reflecting the end of the war, the lifting of sanctions, lower taxes, higher wages and a superb farming season in 1981. But with the world recession and the first drought in 1982, output started to fall and has since declined to a negative rate of about 5 per cent.

Real living standards in per capita terms last year were back to 1980 levels and a good 15 per cent down on their 1974 peak, while employment which rose 60,000 to 1,045,000 after independence has been falling and by next year will be at least 50,000 below its peak nine years ago. During those years, school-leavers have been flood-



## Swaziland says it has foiled 'gang of four' coup bid

SWAZILAND has announced the foiling of a coup attempt and in a separate incident, the arrest of seven armed members of the African National Congress on the Swaziland/Mozambique border. This comes close to the head of the isolated announcement that Swaziland and South Africa had signed a non-aggression and good neighbourliness pact two years before the treaty was signed.

The coup attempt was revealed in yesterday's edition of the Times of Swaziland which reported that it was organised by an unnamed "gang of four" made up of two cabinet ministers, a member of parliament and a prince of Swaziland's ruling royal family.

The Swazi Prime Minister, Prince Bhekuzulu, and Supreme Council of State member Prince Mkhambane were reported to have foiled the plot on March 20, which was aimed at wresting executive power from the ruling monarchy.

Yesterday's announcement of the ANC arrests on the Mozambique border last week may well have been timed to demonstrate good neighbourliness after the weekend announcement that at least an exchange of letters two years ago in February 1982. The accord had been kept secret at the request of the Swazi.

The agreement provides for the two countries to co-operate in the fight against terrorism and subversion and each can call on the other for help in this. Both agree to respect the other's sovereignty and territorial integrity and will not use force against the other.

## India faces greater unrest in North

THE FOUR most northern states of India face widespread disruption and the risk of violence today as a result of mass strikes and demonstrations called by political parties in protest at the killing yesterday of a leading opposition party leader in the Punjab.

Security was tightened and a curfew imposed in the Punjab capital of Amritsar and some other areas to curb disturbances that broke out following the killing of Mr Harbans Lal Khanna, a regional leader of the Bharatiya Janata Party. Mr Khanna's armed bodyguard and a constable in his chemist shop were also killed.

This brought the total of killings in the Punjab during the past three days to 13. It was a major blow to the peace hopes of the Government which on Saturday tried to appease Sikh activists by offering to amend the Indian constitution to reinforce their special identity.

It was the second time in six weeks that government attempts to solve problems underlying the violence in partnership with moderate Sikh activists has been met by violence organised by extremists.

The shooting of Mr Lal Khanna could have a serious impact on the future course of the troubles. Demonstrations were quickly called by his political party and other groups in the Punjab and in the cities of New Delhi and Chandigarh as well as the neighbouring states of Jammu and Kashmir, Haryana and Himachal Pradesh.

After Mr Khanna was shot and his attackers had escaped with his bodyguard's sten gun, buses and shops were set on fire in Amritsar. Shops closed as the violence spread and a curfew was imposed. One other person was also killed in yesterday's Punjab disturbances and an unsuccessful attempt was made to derail a passenger train.

## Howe likely to meet Deng on Hong Kong

THE GROWING likelihood that Sir Geoffrey Howe, the British Foreign Secretary, will have a personal meeting with Deng Xiaoping, the Chinese leader, over the next few months, has been confirmed by a statement on Hong Kong's future will conclude the talks.

Observers both in Peking and Hong Kong increasingly believe that details of a basic agreement between the two countries on the future of the British colony will now be released well in advance of September to enable debate in Britain and Hong Kong before the final signing.

China has set an unofficial September deadline for an agreement on how Britain will relinquish control of Hong Kong in 1997, when its lease over most of the territory runs out.

While the formal Hong Kong negotiations will continue after the visit, Sir Geoffrey appears likely to at least make public the timetable for a Sino-British agreement on returning the Colony to China.

Preparations for the visit now indicate that it will mark a key stage in the eight months of secret talks on Hong Kong, now drawing close to conclusion.

Sir Geoffrey will meet with a range of the most senior Chinese leaders and as to give a news conference before flying on to Hong Kong by private aircraft.

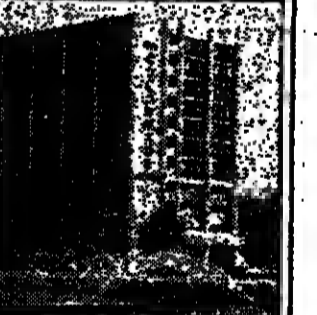
British officials have indicated that Sir Geoffrey will be making a significant statement about the course of the negotiations.

## Philippine job losses increase

NEARLY 65,000 Filipinos have lost their jobs in the past four months as a result of the growing impact of foreign exchange shortages, according to the Ministry of Labour and Employment.

Most of the workers who have been laid off were from the manufacturing sector like textiles, food and fabricated metal. These industries have found it almost impossible to finance the import of raw materials since the debt moratorium began last October.

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## China looks to competition to cut construction costs

CHINA HAS opened major construction projects throughout the country to competitive bidding in an attempt to cut costs.

Contracts for capital construction will now be decided by tender among different government construction departments and collectively owned building units.

In the past, various government departments and regional authorities have held monopolies over construction projects in their areas and simply designated the work to their own building departments.

The State Planning Commission has authorised the use of public bidding after successfully experimenting with it in Shenzhen and Xiamen special economic zones and in the cities of Chongqing and Jilin.

China has been trying recently to reduce the expense of capital construction programmes and cut back on waste and inefficiency.

China's State Council has ordered that all construction projects must be speeded up and subject to stricter controls this year.

It has backed calls by the State Planning Commission for funds, labour, raw materials and equipment to be concentrated on 123 key projects in progress and another 201 projects due to be started this year. Many of the new projects are in the fields of energy and transportation.

## Oil production grows

PEKING — Chinese oilfields pumped 205.66m barrels of crude oil from January 1 to March 30, 5.7 per cent more than in the same period last year, the Petroleum Ministry said.

China's national daily crude output is now 2.28m barrels, 51,680 more than the previous record high in October, 1979, the Ministry said.

It said China may top the 2.16m b/d target set for this year, which compares with 2.12m in 1983.

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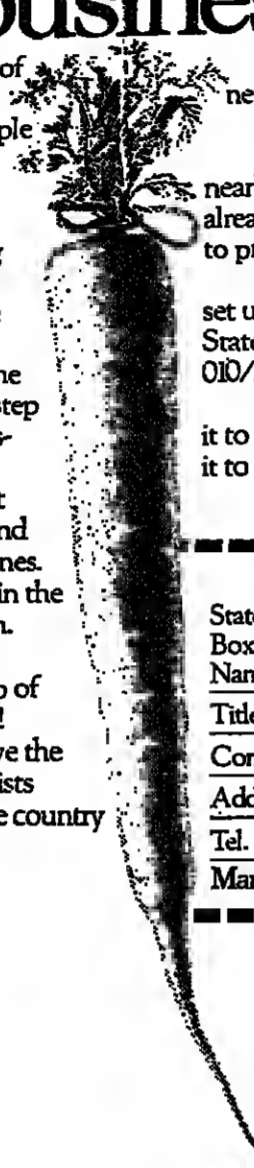
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## Bolivian Left set to rejoin coalition

BY OUR LA PAZ CORRESPONDENT

PRESIDENT Hernan Siles Zuzazo of Bolivia was yesterday reported to be on the brink of success in his bid to tempt the left-wing MIR or Movement of the Revolutionary Left back into his government and into supporting a package of emergency economic measures.

The MIR quit the Government 14 months ago over differences about economic policies, though its leader Sr Jaime Paz Zamora continued in his post of Vice-President. The MIR is understood to be willing to return to the Government in exchange for four ministries in an enlarged cabinet. Since the MIR departure from his 18-month-old government, President Siles has been governing with the help

of his own left centre MNRI, the Communists, the Christian Democrats and independents. Senior officials of the MNRI and the MIR emerging from the talks were optimistic however, that the MIR will return to government.

The likelihood of a breakthrough emerged after three days of talks between Sr Paz and President Siles on ways of overcoming the economic crisis and the terms under which the MIR might rejoin the Government.

The president's planned economic package will reflect pressure from the International Monetary Fund to reduce inflation now running at about 350 per cent a year, and to tackle arrears in servicing the

country's \$4.5bn (£3.1bn) foreign debt. If it is too harsh for the MIR's rank and file to accept, the package could wreck reconstruction of the coalition.

The package is likely to include a doubling of the legal minimum salary, to about Pesos 90,000 (£25) a month, as well as a removal of subsidies on certain basic foods plus sharp increases in the price of petrol and other fuels.

There was a 24-hour general strike during the weekend by way of warning from the main trades union that the Government should do nothing to reduce further the miserable standard of living of most Bolivians.

## Uruguay records trade surplus

By Andrew Whitley in Rio de Janeiro

URUGUAY'S imports last year fell to half their 1981 level, helping it to achieve a trade surplus of \$309m (£213m), the first since 1976.

Figures released last week by the central bank in Montevideo showed that in 1983 Uruguay exported goods worth \$1,018m, up 8.2 per cent on 1982. Imports fell by over 36 per cent to US\$706m.

An increase in exports of primary goods—meat, wool, rice and sea food—to \$364m compensated for a decline to \$550m in so-called non-traditional exports, such as textiles.

Other major declines in imports were recorded by chemical products, down 17 per cent, machines and electrical equipment, down by 42 per cent, and transport vehicles, which registered a 75 per cent fall. However, in the first two months of this year, preliminary figures from the central bank showed a slight decline in exports and an unwelcome 20 per cent jump in imports.

The sharp improvement in Uruguay's trade balance last year was in line with the trend observed by the Inter-American Development Bank for the whole of Latin America. A major report released by the IDB last week showed, among other things, that Latin America obtained a trade surplus with the rest of the world of \$25.4bn in 1983, three times greater than the previous year.

## New Chile Finance Minister

By Mary Helen Spooner in Santiago

SR Carlos Caceres, Chile's Finance Minister, has been removed from his post in a reshuffle of Gen Augusto Pinochet's economic team, the fourth Cabinet change in less than a year.

The new Finance Minister is Sr Luis Escobar, a former Deputy Minister of the Economy, and vice-president of the Hong Kong Shanghai bank branch in Santiago. His appointment does not suggest a major change in the free market economic policies the Pinochet regime has followed since the mid 1970's, but Sr Escobar is expected to follow a more expansionist line than his predecessor, arguing for more state participation in the economy.

Sr Andres Pasicot, Economy Minister, has also been removed and is replaced by Sr Modesto Colados, the outgoing Housing Minister, whose portfolio is being taken over in turn by Sr Miguel Angel Poldu. Sr Colados is the former president of Chile's Chamber of Construction, which has pushed for greater access to credit and public financing.

The Cabinet changes come less than a week after a day of protest against the Pinochet regime, organised by opposition trade unions and political parties, and barely a fortnight after Sr Caceres returned from a series of meetings with representatives of Chile's creditor banks in the United States.

## IMF industrial output indices confirm recovery

BY STEWART FLEMING IN WASHINGTON

A STRONG 1983 recovery in industrial and manufacturing output showed a particularly marked increase in several leading industrialised countries, according to the International Monetary Fund.

The IMF says that particularly sharp 1983 recoveries took place in the U.S. and Norway, which each recorded rises of 6 per cent. These were the main contributors to last year's 3 per cent rise in the IMF's aggregate index of industrial production of 19 industrial countries to 99 (1980 equals 100). Significant increases were also recorded in Japan, the UK, Denmark and

Finland (all up by around 2 per cent).

In contrast, the indexes for West Germany and the Netherlands were unchanged.

Data available for five industrial countries for January of 1984 continues to show a rise, with indexes hitting record levels of 11 for Japan and Norway, 107 for the U.S., 104 for the UK and 108 for the Netherlands.

The IMF executive board has decided there is no need at the moment for a fresh allocation of special drawing rights, a spokesman for the West German finance ministry in Bonn said, Reuter reports.

## Bermuda plans \$8m U.S. bond purchase

BY KEITH HUNT IN BERMUDA

THE Bermuda Government intends to buy \$8m worth of U.S. Treasury zero bonds expected to be worth \$200m in 28 years' time.

The plan was revealed when Mr David Gibbons, the Finance Minister, announced recently another balanced budget for the island totalling \$186.5m for 1984-85.

Mr Gibbons, Bermuda's ex-Prime Minister, said the self-governing colony's next generation would inherit the \$200m on the 400th anniversary of permanent settling.

But the move was immediately condemned by the opposition Progressive Labour Party, whose lead-

er Mrs Lois Browne-Evans said the \$8m should be used for urgent projects, such as housing.

Government income this year is projected at \$186.5m. Spending is expected to be \$189.3m, leaving a \$17m surplus which the Finance Minister intends to switch to the capital account to balance the books.

Last year's original budget estimate stood at \$185.5m.

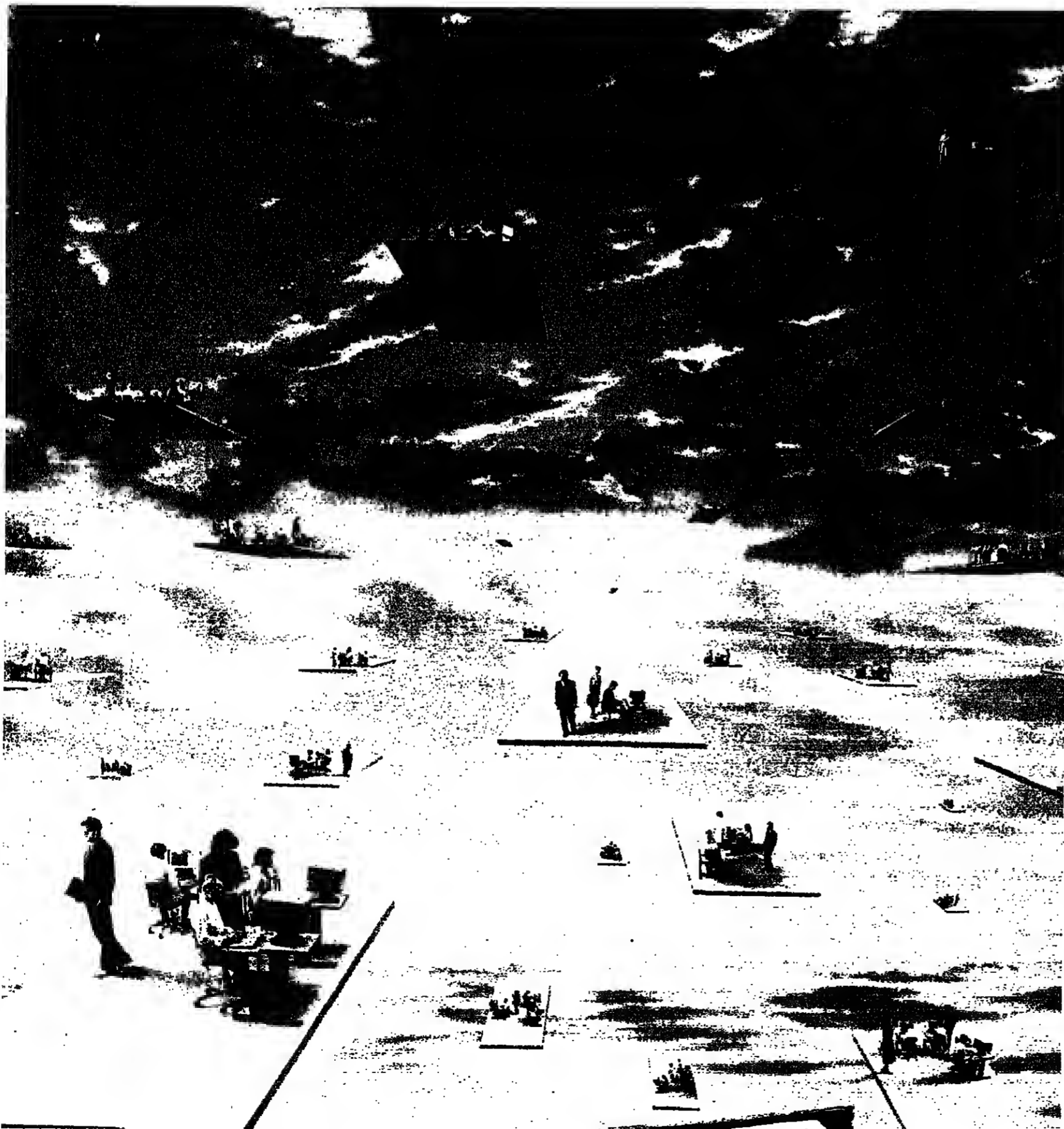
During his budget speech Mr Gibbons said the Government was considering allowing deposit companies to pay long-term depositors more than the statutory 7 per cent

## Texaco withdraws Mukluk plans

ANCHORAGE — Texaco has withdrawn its request for federal Government permission to drill in the Mukluk area of the Beaufort Sea, off Alaska's north slope, Government officials said.

Texaco said the plans were filed while Standard Oil was drilling the Mukluk well, so Texaco could drill a prompt follow-up well if the results of the Mukluk test warranted such action.

Agencies



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**BARCLAYS**

FOREIGN EXCHANGE CENTRE

WORLD TRADE NEWS

Singapore merchant fined for copyright contempt

By Chris Sherwell in Singapore

THE SINGAPORE High Court has imposed a \$82,000 (£665) fine on a local book merchant and ordered him to pay court costs in a book piracy case which will test the legal protection available to British publishers in the island state.

The merchant, Mr Ng Sui Nam, was fined for contempt of court after the High Court had found him in violation of an injunction obtained by the British Publishers Association.

The injunction, first obtained in January, 1982, restrained Mr Ng from infringing the copyright in any works of members of the Association.

MPs 'want to hit back on unitary tax'

By Our Trade Editor

NEARLY 300 of the 650 British MPs in the House of Commons are seeking legislative retaliation against unitary taxation of multinational companies by a dozen U.S. states, it was claimed yesterday.

Leaders of the retaliatory move are tabling an amendment to the Finance Bill that would allow the Government to deny U.S. companies with headquarters in unitary tax States the right to refunds of advance corporation tax (ACT) on dividends paid to them by their UK trading subsidiaries.

Mr Michael Grylls, chairman of the trade and industry committee of Conservative MPs, was in Washington to broadcast the plan to state legislators and businessmen.

His supporters said the proposed amendment reflected "extreme frustration and growing anger" in the British Parliament at the refusal of the U.S. Administration to take action against unitary tax states.

Concern at Nigeria's debt terms

By Quentin Peel, Africa Editor

THE NIGERIAN Government is due to publish tomorrow its formal proposal for rescheduling more than \$3bn (£2.1bn) in arrears of trade payments owing to uninsured suppliers in the face of continuing concern among major creditors at the expected terms and conditions.

Go-ahead for the offer has been given following the granting of all exemptions by the British Department of Trade, to allow the documents to be issued in the name of the Central Bank of Nigeria, rather than an approved dealer.

The offer amounts to one part of a comprehensive rescheduling exercise, involving banks, export credit agencies and uninsured suppliers, while at the same time the Nigerian Government is negotiating with the International Monetary Fund for a three-year extended credit of some \$3bn.

The uninsured creditors are thought to be owed at least \$3bn of an estimated \$6bn of outstanding trade arrears, the balance having been insured by the export credit agencies.

UK mining team to visit Lima

By a Special Correspondent in Lima

TWELVE representatives of the Association of British Mining Equipment Companies (ABMEC) will conclude a tour of Latin American countries with a three-day visit to Lima, capital of Peru, on Wednesday, Thursday and Friday of this week.

America. Exhibitors from all over the world are expected to show exhibits demonstrating the theme "New futures in mining technology."

The ABMEC group will be competing for orders with rivals from the U.S., Canada, Sweden and Japan, as well as Brazil, the only significant manufacturer of mining equipment in the southern continent.

EEC copper sulphate 'dumping' check

BRUSSELS — The European Commission said yesterday it has launched an anti-dumping inquiry into imports of copper sulphate from Bulgaria, Hungary, Poland and Spain.

A Commission official said the EEC's Chemical Manufacturers' Association has complained that imports of the copper sulphate rose to 4,346 tonnes in 1983 from 1,812 tonnes in 1982.

The imports captured a market share of 11 per cent compared to 0.7 per cent in 1980, the official claimed. He also alleged that the importers had "significantly undercut" prices of EEC producers, causing the latter to suffer a drop in production of 37 per cent on an annual basis.

Swiss textile exports reach record high

SWISS textile exports reached a record last year, rising by 3.3 per cent to SwFr2.72bn (£700m), thanks largely to a sharp increase in sales to Germany and the UK as the industry's two leading markets, John Wicks writes from Zurich.

Peking tightens grip on foreign trade

By Christian Tyler, Trade Editor, Recently in Peking

CHINA'S economic planners are tightening their grip on the country's foreign trade in an effort to clear up what they say is the confusion created by the open-door policy of the last five years.

Competition for contracts between provinces and between foreign trade organisations has undermined export price floors and in some cases led to profligate foreign buyers, according to the Ministry of Foreign Economic Relations and Trade.

The decision, taken in January and promulgated last month, is clearly designed to reinforce the disciplines of a socialist planned economy.

But officials at both national and provincial level claim that "foreign friends" — as they call them — are being misled by the "open-door" policy of the last five years.

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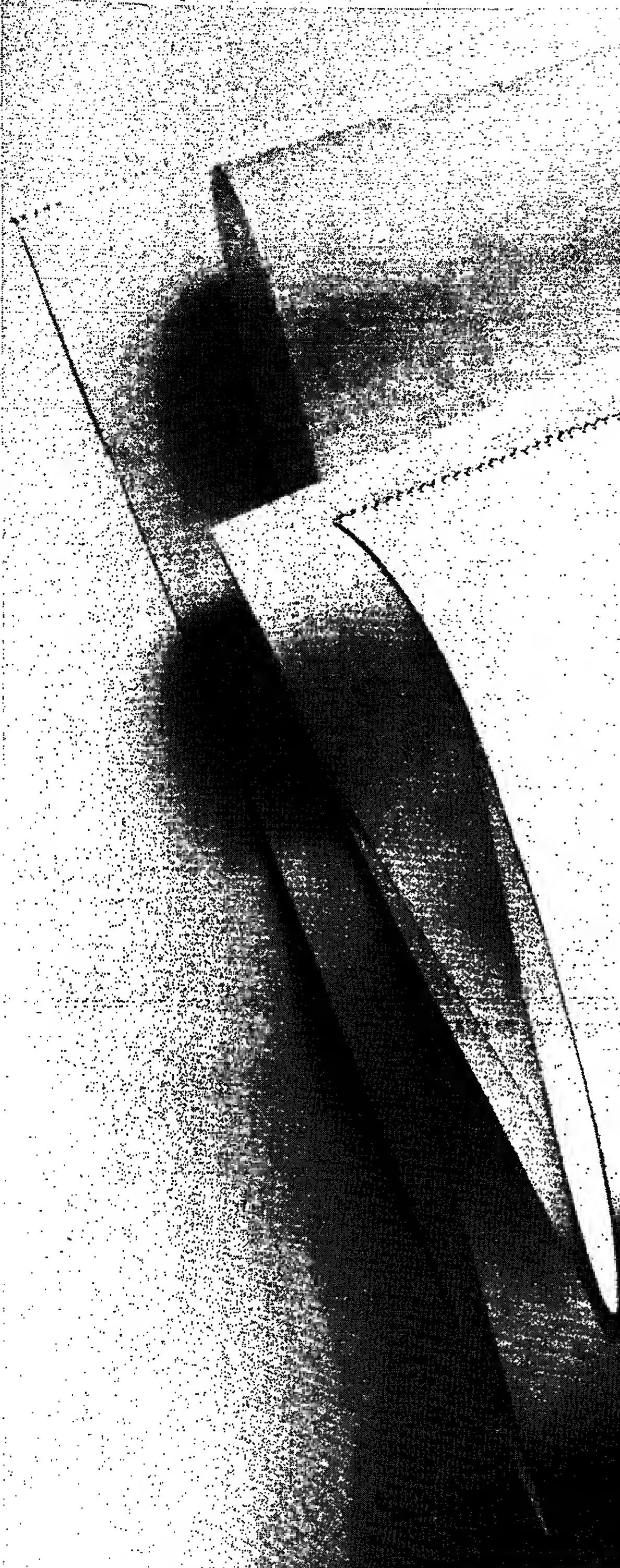
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Advertisement for Trust Bank Africa Ltd, featuring the headline 'TRUST BANK OPENS A BRANCH IN LONDON' and various company notices for F. & C. Oriental Fund S.A., F. & C. Atlantic Fund S.A., Vintool S.A., Pioneer Electronic Corporation, and others.





ITT ANNOUNCES THE END OF  
THE GARBLED TELEM

Short-wave, high frequency radio is often the best, sometimes the only way for distant places to maintain communication with each other. Embassies, for example, find it a very efficient way to exchange information by telex. Properly coded, moreover, it is also much more secure than any telephonic link.

But atmospheric interference can cause occasional distortion and even total breakdown.

Now a completely new short-wave radio system which solves this problem

has been developed by ITT in Sweden. It can handle telex transmissions and voice communications.

The secret lies in the ITT computer linked to the radio. First, it predicts the best frequency for both caller and receiver, using stored information about propagation conditions and time of day. Then, if any interference does subsequently occur, it will automatically relocate to the best available frequency. This can currently take a conventional radio operator anything up to an hour

or more. The computer, on a bad day, might take a whole second.

And, because the computer ensures that the message at the receiving end is identical, letter for letter, with that sent out, garbled telexes, an occasional problem when transmitted by radio, will become a thing of the past.

Which, given the potentially critical nature of many such messages, is just as well.

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## TECHNOLOGY

EDITED BY ALAN CANE

SCIENTISTS TO START TRIALS IN COMBATING DISEASE

## Hopes for laser healing power

BY PETER MARSH

TRIALS with a new form of laser may usher in a new and effective way of treating certain cancers. The work, due to begin in May, involves a team of physicists formerly at Oxford University and medical staff at the Royal Southants Hospital, Southampton.

In the trials, patients will be treated with red light from a particularly powerful source, a gold-vapour laser. Oxford Lasers, a company started by workers at the Clarendon Laboratory of Oxford University, is one of a handful of organisations around the world to sell the hardware.

The laser will be used in photoradiation therapy—a treatment for cancer with which hospitals have experimented since the late 1970s. But application of the treatment, which kills cancerous cells while leaving healthy tissue unscathed, has been impeded by the lack of lasers that produce light of the correct wavelength at a high enough power.

Mr John Carruth, a surgeon at the Royal Southants Hospital, plans to use a 9W gold-vapour laser to treat a variety of tumours. Mr Carruth says that results from an earlier trial, using a dye laser that produced only 1W, were "excit-

If the trials are successful photoradiation could become routine

ing and encouraging." In the trial, Mr Carruth treated patients with tumours of the brain, lung and bladder.

To treat patients in this initial work often took several hours. The tumours had to be irradiated for long periods to transfer to them enough photons to complete the treatment.

With the new laser, says Mr Carruth, times for treatment can be cut by a factor of 10. In many cases, this will make the therapy more bearable for the patient. To treat cancers inside the body, in the intestine for example, the laser light has to be "piped" by optical fibre to the site of the tumour, which can mean long spells of discomfort in the operating theatre.

If the trials with the new laser are successful, photoradiation



Patient injected with HPD (above); laser then destroys cancerous cells

therapy with gold-vapour hardware could become routine in hospitals in a few years, according to Mr Carruth.

In photoradiation therapy, the patient is first injected with a drug, haematoporphyrin derivative. After about three days, this has infused through the veins. But it remains lodged only in cancerous tissue.

When illuminated by red light (of wavelength around 600 nanometres) the drug decomposes to produce chemicals that kill surrounding cells. The therapy thus destroys malignant tissue, while leaving healthy cells untouched.

Oxford Lasers is one of only three organisations that make gold-vapour lasers, according to the company. The others are Plasma Kinetics of California and Quentron in Adelaide, Australia.

The hardware can be operated reasonably economically at high powers because of its relatively high efficiency. A 9W gold-vapour laser, which costs some £30,000, needs about 5 kW of electricity. In contrast, a dye laser of comparable output requires, at the very least, twice as much electrical power.

Gold-vapour devices belong to the same family as copper-vapour lasers. In both types, electricity is squirted through

a tube which contains a gold or copper wire. The interior of the tube is at a high temperature, of up to 1,600°C in the case of the copper hardware.

Both types of laser require relatively little energy to lift atoms from a low energy state to an excited level—which explains why the lasers offer high efficiencies. Copper-vapour lasers have a better performance than the gold devices.

They produce, says Oxford Lasers, the highest average power in the visible range than any other lasers that are commercially available. The copper devices can produce 25 W with an electrical input of only 3.5 kW.

Once they have been "pumped" to the excited state, the atoms fall in energy to an intermediate level, in the process releasing radiation in the form of laser light. Both copper and gold lasers produce light of a wavelength around 600 nm.

Oxford Lasers sees a range of applications for its copper-vapour lasers which, in their basic 10 W form, sell for about £20,000. The company has sold 15 of these systems, mainly to the UK Atomic Energy Authority for experiments in enriching the uranium fuel for nuclear power stations.

The Oxford company also plans to sell the hardware to

customers who require powerful laser beams for displays, but who do not want vast electricity bills.

Oxford Lasers started life as a classic spin-off from a university activity—it was originally based in a garage. Alan Corney, an Oxford physicist who owned the garage, persuaded other colleagues to join him and two years ago the company moved to purpose-built premises. Over the past year, the enterprise has sold lasers worth £750,000, a threefold improvement on the figure for the previous 12 months.

The company has also obtained £180,000 from the Wolfson Foundation to increase the power of its copper-vapour lasers to 100 kW. The foundation is also helping out with the costs of the cancer trials at the Southampton hospital.

Oxford Lasers's other products include excimer lasers—which produce very high powers in short pulses—and hardware that purifies the gases used in gas lasers. A big customer for the second type of product is the Ministry of Defence.

No fewer than six people from the Clarendon Laboratory are directors of Oxford Lasers. Besides Dr Corney, they are Dr Andrew Kearsley, Dr Colin Webb, Dr Jobo Deoch, Dr Tony Andrews and Mr Keith Errey.

## Photographic lessons for video industry

IF PRIZES for valour were ever awarded in the video industry, Philips last week scooped the honours by announcing its intention to market the rival VHS video format in UK this year. In facing up to the reality of the supremacy of VHS in nearly all markets of the world, Philips displayed a remarkable spirit of frankness—unlike the secrecy of the late 1970s when their V2000 system was rumoured to exist but denied by innocent-faced executives.

In the video industry, the reasons for consumer resistance to the sophisticated V2000 are well known, summed up by Philips' UK video marketing director Derek Hazell as "we offered a little too much a little too late."

There is, however, irony about last week's announcement by Philips. It intends to continue to market its own V2000 system because—with some justification—Philips regards it as "the Rolls-Royce" of video. And when the history of consumer video is written, it may be that the problems of marketing a Rolls-Royce to the underscoring public will emerge as one of the causes of financial disaster. One of the very first consumer videotape systems, sold in the U.S. by Avco Embassy under the name Cartrivision, failed because it was combined with a TV set in a colonial-style cabinet marketed for lawyers and oilfield owners.

Perhaps marketing men should take more notice of history, because there are many parallels to draw upon. The photographic industry, now seriously challenged by video, has travelled up and down the quality switchback—first as a medium for the amateur gentleman with time and money to spare (every plate sensitised in a portable darkroom by the user); later as a mass consumer product where simplicity rather than quality was the attraction (Kodak's slogan of the 1890s—"you press the button, we do the rest"). Then back to quality again with the arrival of reflex cameras such as the Rolleiflex, and innovations such as the 35 mm Leica.

Yet even 35 mm, now the preferred format for professionals and amateurs alike, was once regarded as inferior—even

as late as the 1960s. It has since become respectable and capable of most tasks set before it. None the less, larger format cameras such as the Hasselblad—now well over £1,500 for a basic outfit—have demonstrated that a market can exist for superior quality imaging equipment, however expensive.

The success of the Hasselblad has been predicated, however, on the recognition by potential users of the differences which prevail as the law of diminishing returns operates on pricing. An example of how discriminating the photographer has become is provided by a recent Hasselblad touring presentation called "Three Hours to Better Photography." Nearly 1,500 people in the UK have paid £7.50 a head to watch a remarkable slide show about the really finer points of photography.

## Video &amp; Film

BY JOHN CHITTOCK

Still photography has pursued a relentless course to improve picture quality

Consumer video, regrettably, is characterised by fuzzy definition and generally an abundance of picture faults. Until now, not only has the consumer not cared, but probably not noticed anyway. Hence, perhaps, the poignancy of Mr Hazell's remark "too much, too late." The VHS format was ready before V2000, with very adequate picture quality and—unlike the V2000—simplicity of operation. It was the video industry's answer to "you press the button and we do the rest."

No doubt the Hasselblad or even a modest 35 mm single lens reflex camera would have failed in the 1960s—too complicated to operate, too expensive, and too refined in technical sophistication to be appreciated by a public largely unaware of photography.

Consumer video is now, however, approaching the crossroads. When making the announcements last week, Philips predicted that annual sales of VCRs in the UK would now begin to level out. This must mean that the public will pause to catch its breath—and maybe learn more about the finer points of video, demanding better picture quality, even, perhaps, being ready to pay for it.

Still photography has pursued a relentless course in striving to improve picture quality. One example of this is Kodak's remarkable emulsions using the new T-grain technology (faster speed with finer grain and greater sharpness—usually three incompatible qualities). The Kodak disc camera, for all its apparent simplicity, is a response to a careful evaluation of how the average snapshotter was failing to get good pictures—and the disc camera is cunningly designed to minimise the incidence of these common faults.

The video industry would do well to consider this evolution of still photography. The next generation of VCRs must offer benefits for the discerning consumer, not with the adornments of so-called "bells and whistles" but through making real strides in picture quality. Another lesson here, perhaps, is the relative failure of instant photography—the picture quality just has not been good enough.

In video, and electronics generally, the Japanese have demonstrated a remarkable flair for gauging consumer needs—whereas the West has shown itself sometimes to be just too clever, too preoccupied with the product instead of the customer. The magic of Japanese technology is not in its achievement, but its relevance.

Philips has shown that it can get the technology right, and ironically might do better now by following instead of trying to lead. The time may be premature for a Hasselblad equivalent of the VCR. But if consumer video is to broadcast TV what 35 mm photography was to 6 x 6 cm in the 1960s, there is scope for Europe to learn from the failures of its photographic industry.

## Design Joint agreement

CALMA and CAE International, two companies within General Electric (U.S.) which have so far operated more or less independently in the computer aided design and engineering areas, are now to operate jointly to develop and market a new CAE/CAD system for mechanical product design.

Basically, the databases of Calma's design, draughting and manufacturing system (BDM) and CAE International's mechanical modelling and analysis system will be coupled.

As a result, engineers will have "unmatched functional capabilities" for conceptual design, simulation, detailing and manufacturing of complex mechanical products.

## Telecomms

## Voice and data

DATABIT of Northampton is supplying British Telecom with a unit that provides two telephone circuits on a conventional two wire subscriber line, plus data transmission.

Unlike conventional analogue carrier frequency-based systems for this purpose, the digital "1+1" unit transmits the second telephone circuit in digital form. The technology the company is using is similar to that required for fully digital subscriber lines and could be the forerunner of the fully integrated service digital network (ISDN) says the company.

BT initially will use it to provide a second voice channel on a cable pair where analogue 1+1 might suffer interference in a local digital environment. More on 0604 65231.

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UK NEWS

# Cable television plans 'run risk of failure'

BY GUY DE JONQUIERES

MULTI-CHANNEL cable television is in danger of being a commercial failure in Western Europe unless government policies are radically changed, according to a report by CIT Research, an independent UK market research company.

The report warns that most new cable systems planned under existing policies will lose money or be only marginally profitable - if they ever begin operating at all - and will find it difficult to attract subscribers quickly.

At best, only 20 per cent of UK households would be linked to cable in 10 years' time. That compares with a forecast of 36 per cent which CIT made in late 1982 in a report commissioned by the British Government and several prospective cable operators.

The number of British households linked to cable television has already fallen to 1.3m, from 1.6m in 1980, as loss-making, older systems have closed. Without more commercial incentives to build new networks, the total number of subscribers could fall still further by 1990.

The report says that most European governments are jeopardising the growth of cable by insisting on systems which are too costly and technically ambitious; by ignoring the need for high-quality programming; and by shackling the industry with excessive financial and legal restrictions.

CIT is gloomy about the prospects for attracting private investment in cable in the UK unless the Government gives prospective operators much more control over the

design and construction of their systems and allows them to accept programme sponsorship.

The phasing out of 100 per cent first-year capital allowances, announced in the last budget, was also a setback. Only cable systems laid by British Telecom in its own ducts stood a chance of being profitable, unless the Government changed its policy to allow cable to be laid above ground.

The Government plans to issue 11 interim cable franchises soon, and to award more after the cable television Bill becomes law later this year. Although it wants cable to be wholly privately-financed, it is insisting on certain technical criteria for planned systems.

According to another study, published by the Broadcasting Research Unit yesterday, cable television, direct broadcasting by satellite and home video recording will be unlikely to have much impact on the BBC and independent television for at least a decade.

The study, "Beyond Broadcasting: into the Cable Age" by Dr Timothy Hollins, forecasts that by 1994 the three competing media will have deprived the BBC and commercial broadcasters of a maximum 15-18 per cent share of prime time audiences.

Some ITV companies could lose up to 23 per cent of their revenues. But Dr Hollins suggests that the actual loss may be far lower, and is confident that the BBC can continue to justify its claim for a national licence fee for the next decade.

# Rail union instructs members not to move coal

BY OUR LABOUR STAFF

THE EXECUTIVE of the National Union of Railwaymen (NUR) last night instructed its members not to move any coal or coke during the miners' dispute. The executive of Aslef, the train drivers' union, has also decided to block coal movements.

Rail traffic is vital to the transport of coal supplies to the 100 power stations of the Central Electricity Generating Board (CEGB). Coal makes up about 80 per cent of power

stations' fuel and, of that coal, about three quarters is moved by rail.

Mr Peter Walker, the Energy Secretary, told the House of Commons yesterday that coal stocks at power stations were certainly likely to last about six months.

The National Union of Mineworkers (NUM) claimed, however, that at one important power station, Didcot in Oxfordshire, there was only eight weeks' supply and that

this was typical of all power stations.

A spokesman for the CEGB said the board would not issue reports about specific stocks and would not comment on the situation at Didcot. "Coal stocks at power stations remain high," he said. "They have not run down faster than anticipated and we are confident we can maintain supplies of electricity for several months."

If the NUR and Aslef are successful

in persuading their members not to move coal trains, there could be serious financial consequences for British Rail (BR), at least in the short term. Coal and coke constitute about 60 per cent of BR's freight train traffic. However, coal and coke only provide 47 per cent of the freight receipts.

BR is waiting to see what action union members take before deciding whether to seek a court injunction to prevent unlawful secondary

industrial action. Only a handful of train drivers refused to move coal yesterday and there were reports of Aslef branches viewing the union's call not as an instruction but as a matter for individual decision.

Coal shortages due to the strike yesterday caused redundancies to be announced at British Steel's works at Scunthorpe, Lincolnshire. More than 150 workers will be made redundant or laid off. The works, which obtains most of its

coal from South Yorkshire pits, has had to cut production by 65 per cent.

There were signs yesterday of a return to work by some miners. All 23 collieries in the Nottinghamshire coalfield were working normally and another 15 were producing in the Midlands and western areas.

According to Scotland Yard, 12 more pickets were arrested yesterday bringing the total to 540

# Reuters profit jumps 50% to £55.2m pre-tax

BY CHARLES BATCHELOR

REUTERS, the international news agency and business information group, yesterday set the stage for next month's planned public flotation with the announcement of a 50 per cent rise in 1983 pre-tax profits.

Unaudited preliminary results show that profit rose to £55.2m in the year to December, from £36.73m in 1982. Reuters plans to pay a final dividend of £40, making a total of £90 for the year, compared with £80 in 1982.

Turnover rose 35 per cent to £42.6m from £31.9m, with the result that pre-tax profits rose to 23

per cent of sales, compared with 20 per cent the year before.

Stockbroking analysts said these figures would provide a sound basis for the proposed simultaneous flotation of Reuters in London and New York.

They had been forecasting profits in the £50m to £82.5m range. Mr Nigel Judah, finance director of Reuters, said: "I think an increase in profit of 50 per cent shows that the company is very healthy indeed. It is a very satisfactory result."

# Retail sales recover

SPENDING in shops rose sharply in February, according to revised estimates from the Department of Trade and Industry. Figures suggest that the volume of retail sales recovered after a depressed January, with a 1 1/2 per cent increase. This is significantly better than the provisional estimate published last month.

Separate figures from the department show that the rise in spending continues to be financed to a large extent by credit.

New consumer credit advanced by finance houses and other specialist companies was a record £1.01bn in February. In the three months to February, £2.96bn of new credit was advanced, 8 1/2 per cent more than in the previous three months.

● COMPAQ Computer of the U.S. has started operations in the UK. It is offering, through dealers, personal computers at a minimum price of £1,795, but has no plans to manufacture in Britain.

The company had a turnover of more than \$11m (£7m) in 1983, its first year of operation. It has an annual production rate of 100,000 computers which is rising rapidly.

● THE STOCK EXCHANGE held up the launch of philatelist Stanley Gibbons on the Unlisted Securities Market while it investigated the former business activities of its chairman.

This was prompted by comments in newspapers about the business affairs of Mr Clive Feigenbaum out

side those of Stanley Gibbons. He became chairman of Gibbons in January.

● H. ELLIOTT, the loss-making machine tool and merchandising group, is closing two of its four UK factories with the loss of 150 jobs. It said it could no longer support the losses of the four factories that formed the Butler and Newall machine tool subsidiary.

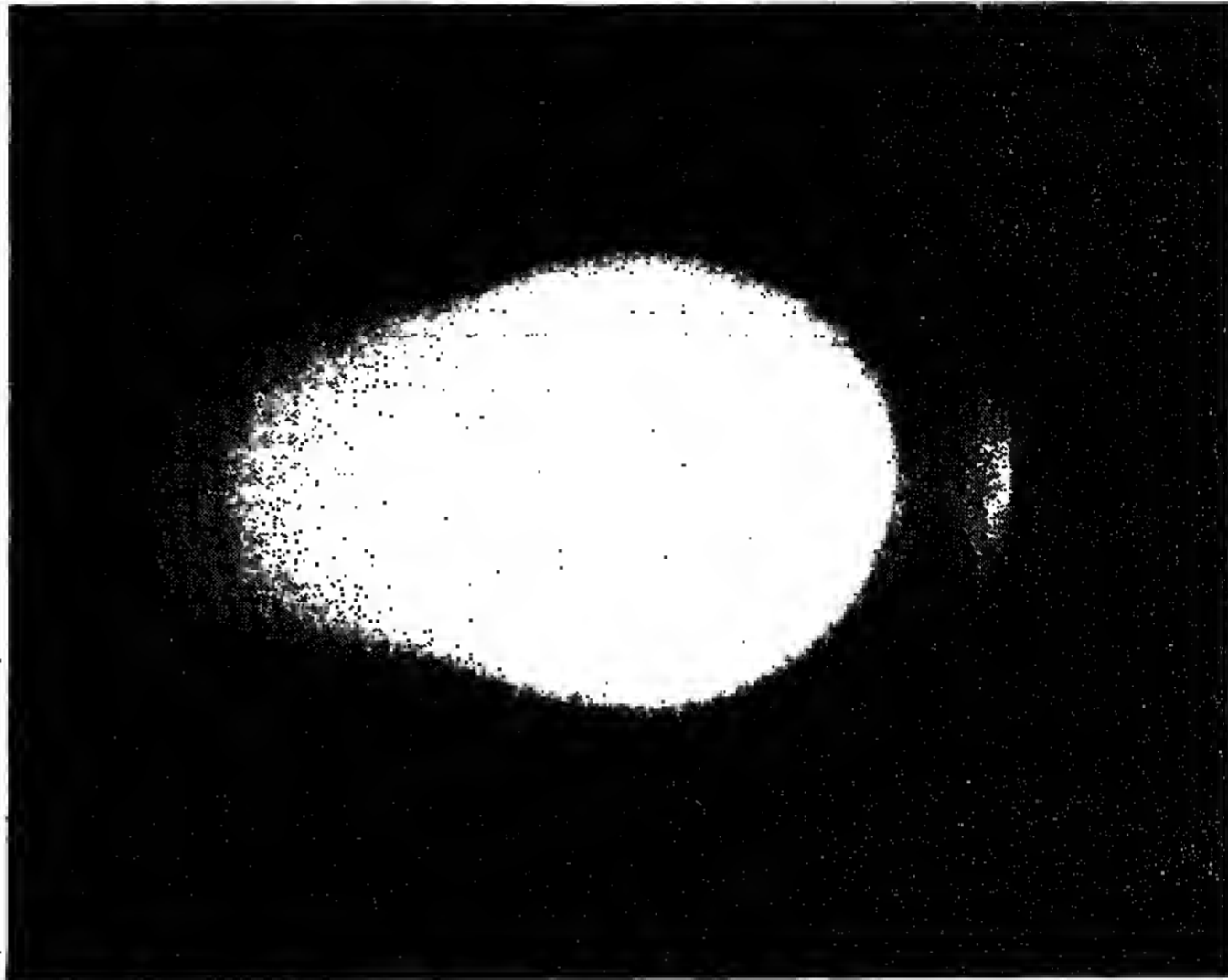
● GENERAL Electric Company is to double its production capacity for optical fibres, the hair-thin strands of glass which carry communications in the form of light pulses. The investment, which will cost £1m, will raise capacity from under 20,000 km a year to 50,000 km.

● A FURTHER attempt is being made to market Romanian-made vehicles in the UK. Dacia Concessionaires has bought the assets of the Dacia Car Company which failed in June last year. The new company will import commercial vehicles.

● PLESSEY'S telecommunications division plans to cut more than 800 jobs at its plant at Edge Lane, Liverpool, by the middle of next year as it switches production from older mechanical telephone exchanges to the fully-electronic System X.

This follows the company's decision last January to reduce by 840 the number of jobs at two other telecommunications factories in Lamberhead, Wigan, and South Shields, near Newcastle-upon-Tyne. The Lamberhead plant is due to close next month.

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THE ARTS

London Galleries/William Packer

Survivors in private and public view

Leon Kossoff: Recent paintings, Fischer Fine Art, Ends April 27. Leon Kossoff: Drawings and etchings. Bernard Jacobson, Ends April 27. Gilbert and George: The Believing World, Anthony d'Offay, Ends May 4.

The habit of competition dies very hard, and we are still perhaps, too inclined to see everything in the simple terms of winner and loser...

With artists the problem takes a particular form for, by the very nature of their activity, groups come easily together, and shared preoccupations, interests and principles are readily confirmed by the chances of education, friendship, natural sympathy and talent.

And of course the best will out, or so we hope; but good artists, even so, are likely to be singled out in the first instance quite as much by luck as talent, by a dealer's arbitrary preference perhaps, and a hole in his schedule, a critic's visit at a happy moment, a curator's early purchase, a selector's vote.

Such is the luck of the draw, which artists generally accept with a decent fatalism—for they can do little about it. And between themselves they ignore it, knowing as they do far better than any others their true relative standing, and the particular differences and distinctions in their work.

Leon Kossoff is now in his late 50s, and for as long as 20 years has been demonstrably one of our most consistent and distinguished painters, so much

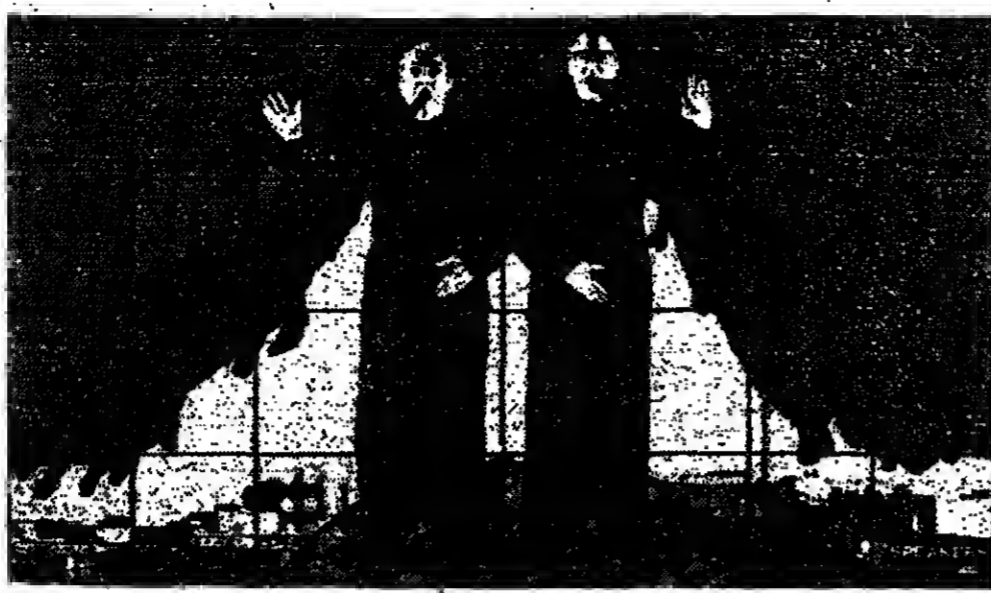
so indeed that but for a coincidence of careers it would hardly need saying. But as a student under David Bomberg at the turn of the 1930s, his contemporary was Frank Auerbach, who has remained a friend and close associate. And Auerbach's has been the career to prosper. He too is a wonderful painter. He is not a man who is not at all to his detriment, but simply to make the point.

For close in sympathy though their work has always been and their methods and practice superficially so similar, it has never been the case that this one was mere second best, accepted as it were, to the other. Kossoff is as he has always been, entirely his own man and always quite distinct in his work. That he is not better known than he is, in both domestic and international terms, is the fault of others, not himself.

At a time when figurative expressionism is the last word in international critical fashion, and young painters of great ambition but less talent make prodigious fortunes, it would have been good to celebrate, as some such festival as the Venice Biennale in 1982, the serious and sustained achievement of 30 years. But the moment passed and the chance was lost.

He finds his subjects close to home: the domestic convention piece; portrait studies of family, friends, himself; the life model in the studio; studies after the masters, Rembrandt in particular, and of drawings and etchings at Bernard Jacobson.

His palette is close-toned and curiously heached, buff, brown, grey, olive, apples yellow and blue, and a little red. The paint is thick and chotted, the surface worked and reworked until the mark of the brush as it is



'Speakers' with Gilbert and George: cool radical cheek

laid on matches in its simplicity and physical presence the painter's intended statement. The exercise is in truth not so much to appearance as to physical sensation, presence, experience, the achieved image not so much a representation as an imaginative yet very real, palpable equivalent.

With the drawings the process goes oddly into reverse to achieve the same pictorial authority and independence, the process not cumulative but reductive, the image worn down as it is restated, and obliterated, and laid on again with that last swift, sometimes almost throw away decision. Yet what remains is certain and convincing, invested with an imaginative grandeur and scope quite beyond its actual scale.

We look at these paintings not for what they represent but for what they are. And it is one of the mysteries of true art that only then do we move into the artist's own imaginative world, only then do his preoccupations, interests, vision, become our own. Looking at paintings should always be a very physical, literally sensational business.

Gilbert and George are sensational in the more usual sense, and indeed in the 15 years or so of their collaborative career have won an international reputation matched in modern times by a mere handful of British artists. Quite why this should be so is a large question, but one which their recent critical success has in America and now "The Believing World," their latest show at Anthony d'Offay, begin to hint an answer. For their work has been above all a museum and institutional reputation, their present standing a curious kind of curatorial achievement.

They put themselves at the centre of their work, made of their life in art both subject and material; and in making thus quite literally an exhibition of themselves, they hit upon a form that was attractive, apparently controversial, infinitely renewable, and a ready package in itself. Ring the changes with a decent professionalism and the world is yours.

And the curators of the world's museums have been largely persuaded by their cool radical cheek, by their multipanelled photo-montage, so

beautifully, immaculately presented, that nods with ever light shift of the iconographical wind, now towards sociological graffiti, now to skinheads, punks, beautiful youths, to religion, war, Royalty, Old Nick himself—nostalgie de la bone dressed up as social concern.

Artists, for their part, have remained generally sceptical, for Gilbert and George have few practical followers, and have exerted surprisingly little direct influence, far less certainly than their fellows in St Martin's Sculpture School's second and conceptual wave, Richard Long and Barry Flanagan. But the graphic wit and elegance of their invention are undeniable; and it had seemed, moreover, that as they moved away from their own direct, if ironic, personal involvement in their imagery, so the work was given a certain strength, its imaginative possibilities rather more extended. With this exhibition we are back to easier and obvious pictorial answers, Gilbert and George splashing still by themselves in the pseudo-profound, that is to say the shallow end of the pool.

War and Peace/Coliseum

Rodney Milnes

I wonder how much David Pownall's Master Class has affected London audiences' reactions to Prokofiev's inspired, sprawling, uneven, poster-paint opera? Or the knowledge that some of the best music was recycled from an earlier, unperformed suite of incidental music for a dramatization of Eugene Onegin? Do the overly propagandist - patriotic passages start to sound too obviously written to satisfy the dread Soviet Committee on the Arts? Is the lyrical music somewhat indiscriminately re-used, perhaps too all-purpose? Was Prokofiev writing down to his audience?

That such worries obtruded seldom during last Saturday's performance and only fitfully afterwards is warm tribute to Colin Graham's classic ENO production, powerfully revived for inclusion in the repertoire of the forthcoming U.S. tour. The technical skill of the staging, its unobtrusive detail as well as its confidently handled cinematic sweep, make the best possible case for the work: in the cold light of day War and Peace doesn't look like a flawless masterpiece, then in a performance as fine as this it emerges as - something very close to it.

The more so when conducted with as much understanding as

it is by James Lockhart. With iron control over a highly responsive orchestra he demonstrates the composer's complete command of operatic technique: the scenes, you notice, are just the right length; the balance between verbal and musical priorities in them is perfectly judged, and as well as shaping the tunes with great warmth Mr Lockhart ensures that the words are audible. Prokofiev's skill in communicating so much in so short a time span (the first act feels only about half of its 90 minutes) cannot be denied. Whatever doubts may lurk about the consistency of the musical inspiration, in Mr Lockhart's hands there can be none about the way it is manipulated.

One of the strengths of the production is the way it accommodated cast changes over its 12 years. There are some old friends here—Ellene Hannan's infinitely appealing Natasha, phrased with glowing musicianship, Norman Bailey's Muskrat, a performance of epic grandeur, and perhaps most remarkable of all Kenneth Woolman's Pierre, in that in terms of purely musical delineation he is one of the company's rare failures and the fact that the character still makes so striking an impression is almost entirely due to

Mr Woolman's powerful physical impersonation.

Foremost amongst the newcomers is Russell Smythe as Andrei. A Pelléas like his predecessor Thomas Allen, he commands the high tessitura, which nevertheless cannot make his opening solo any less terrifying to sing cold. Mr Smythe's clear, lyrical account gave much pleasure; confidence acquired during the run will doubtless add to it. His romantic good looks are a help. Linda McLeod's Sonya and Annal Howard-Jones and Hélène are both assets, and Christopher Booth-Jones seizes his opportunities as Denisov. Two more principals new to their roles have a special relevance. As Princess Maria, Jean Rigby creates a character of great depth with a mere handful of lines, and Alan Woodrow makes a vivid impact as Barclay de Tolly at the Council of Fili. In both cases the triumph is Prokofiev's; in the former it is his music, and if you are going to set a GPO conference to music then this is the way to do it—it is a wholly riveting episode. I seem to have talked myself out of the series by the time I got to the moment in War and Peace, at least not in the theatre and certainly not in Mr Graham's masterly staging.

Royal Philharmonic/Festival Hall

Andrew Clements

The last concert of the first for the Holst Music Festival on Sunday produced for the first time a cogent, nicely balanced programme—the kind of mixed planning the rest of the festival's best have conspired but signally failed to manage. It was given by the Royal Philharmonic Orchestra conducted by Norman Del Mar, and the audience was the largest I have seen for the series—around 60 per cent of the Festival Hall's capacity.

Included, singular event for this series, was an unequalled masterpiece. Holst's Egdon Heath is the closest British music ever came to the strangeness and dramatic effectiveness of the Sibelius tone poem, whose presence hung heavily over so many composers in the 1920s and 1930s. It is lean music, with not a note wasted and quite without the lapses into functionless modality that dilute much of Holst's orchestral writing.

Its clear-cut proportioning made a pointed contrast with Constant Lambert's ramshackle Music for Orchestra, written in the same year (1927); an introduction and allegro that begins well, but fizzles out into folkly fugues and some awkwardly managed transitions. Mr Del Mar shaped both works

with care, but his slowish tempi for the Holst lacked purpose at times.

The festival included in its first concert last autumn the first London performance of Lennox Berkeley's long-forgotten early concerto, weakly and unmemorably constructed, and it closed with the same composer's violin concerto, completed in 1961 for Yehudi Menuhin. Mr Menuhin played it rather effortfully here, revealing a shapely, tightly argued work with chamber-orchestra accompaniment and furnished with some well characterised and highly functional ideas.

With Thea Musgrave's concerto for orchestra and the suite from Arthur Bliss's ballet Checkmate the musical substance after the interval was more diffuse. But the concerto at least brought a gently nostalgic resonance of British music in the 1960s, when Roberto Gerhard was being widely promoted and the coolly aleatoric of the Polish avant garde was finding a ready market. Miss Musgrave's self-consciously theatrical score is I fear already somewhat dated, though the RPO did not project it with the conviction and flair it demands.

Yesterday's BBC lunchtime recital at St John's Smith Square produced a first performance. Between Mozart's Adagio and Rondo in C (1777) and a boldly romantic account of Schoenberg's first chamber symphony the Koenig ensemble introduced Marco Tutino's Light Sonata commissioned for the series by the BBC. Tutino, is Milanese, born in 1954, and apparently pre-occupied in recent works with the expressive and melodic potential of the convention of popular idiom. The Light Sonata continues this path and takes it into the realm of Rock as a "detailed study" of its forms and procedures and in particular those of the New Wave.

The material obtained from the studies is, certainly, abstracted, for the piece is in no sense a study of the smooth, geared and carefully finished instrumental essay which bears the broad outline of a three-part form. It is woven out of a wealth of repeated patterns—harmonies, melodic and rhythmic—proceeding a texture of manner, rather akin to neoclassical Stravinsky in its clear-cut sounds and low level of dissonance. A brisk, rather engaging piece, certainly insubstantial yet proclaiming a distinctive creative personality.

English Festival Chorus/St John's, Smith Square

David Murray

Only two years old, the English Festival Chorus is doing justice to its sequence of high dramatic contrasts. Wolf's gentler choruses, the 6 Sacred Songs after Eichendorff, had passages that floated radiantly, and the mood of each song was delicately marked. In this refined music were heard more often in such sympathetic performances, it would soon cease to languish on the fringes of the repertoire.

After that display of poise, it was not surprising that the pithy choral utterances of Schubert's Passion leapt regularly to life, with no skilful more serious than an entry or two that had to be hastily got together. The work was sung in English, and most of the solo stanzas, sung by John Campbell's Evangelist and Trevor Craddock's Christus through the

Festival Chorus served quite suitably well, and they had done justice to its sequence of high dramatic contrasts. Wolf's gentler choruses, the 6 Sacred Songs after Eichendorff, had passages that floated radiantly, and the mood of each song was delicately marked. In this refined music were heard more often in such sympathetic performances, it would soon cease to languish on the fringes of the repertoire.

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The Pru backs the theatre

The Prudential Assurance has become a sponsor of the arts. It is backing Orchard Theatre, the leading touring company in the south west, to the tune of £9,000, enabling it to present four plays throughout the region: A Study in Scarlet; The Passion Play; The Song of Tristan; and For From the Madding Crowd.

Arts Guide

March 30-April 5

Opera and Ballet

WEST GERMANY

Berlin, Deutsche Oper: La Forza del Destino, sung in Italian, with Gladys Varsady, Livia Suda, and Giorgio Merighi. It is produced by controversial Hans Neuenfels. Tosca has Eva Marton in the title role.

Hamburg, Staatsoper: Le Nozze di Figaro features Ann Murray and Marie McLaughlin in a Götz Friedrich production. Arabella has Judith Beckmann in the title role. Fidelio is cast with Gwyneth Jones, Manfred Jung and Franz Frenn. Manfred and Elia Maskenball, starring Piero Cappuccini as Renato and Sylvia Saxe as Amelia.

Cologne, Opera: Jean-Pierre Ponnau's new production of Carmen has Kathleen Kuhlmann as Carmen and Luis Lima as Don José. Così fan tutte is also offered, and to commemorate Wagner's 100th anniversary Parsifal is performed with Walter Raffaele in the title role.

Frankfurt, Opera: East German Ruth Berghaus's production of Berlioz's The Trojans is added to the week's programme of Der Wildschütz, and The Magic Flute with Elsie Hobarth as Queen of the Night.

Munich, Bayerische Staatsoper: Simon Boccanegra has Mara Zampieri and Martin Tshelva in the leading roles. There is a new production by John Copley of Adriana Lecocquer, conducted by Giuseppe Patane with

Margaret Price, Hanns Schwarz and Neil Shilton in the leading roles. Un Ballo in Maschera has Lucia Florit and Luis Lima in the cast, and Don Pasquale rounds off the programme.

Milan, Teatro alla Scala: I Pagliacci, directed and with scenery by Franco Zeffirelli, and La Strada, choreography by Mario Pistoni and danced by Carla Fracci. (Sat, Thur) (809126)

Venice, Gran Teatro La Fenice: new production of Rossini's L'Italiana in Algeri conducted by Gelmetti with Marilyn Horne and Samuel Ramey. (Tue) (25191).

Verona, Teatro Filarmonico: New version of Manon Lescaut by Daniel-François Esprit Aubert, directed by Dominique Delonche, conducted by Jean-Pierre Mariot. (Sun mat, Thur) (221880)

Turin, Teatro Regio: Thais by Massenet conducted by Reynaldo Giovanetti. (Sun); Donizetti's Tain dell'Imbarcazio with Luciana Serra. (Tue, Thur) (548000)

Bologna, Teatro Comunale: Richard Coeur de Lion, a three-act comic opera by Andre Ernesta. (Sat, Tue) (222890).

VIENNA Staatsoper: Verdi's Rigoletto conducted by Graf (Fri, Mon). Verdi's Simon Boccanegra conducted by Claudio Abbado with Biondelli, Gonde,

Bruno, Carreras, Raimondi, Schiavi, Sifria. (Sat, Tue). 5324/2853 Volkoper: Herzmans "Hello Dolly" conducted by Rudolf Bibl (Wed)

"Dance 84" Festival: Giselle by the Vienna State Opera Ballet. Choreographed by Alicia Alonso, starring Lily Jacsó, Scheverson, Ludwig Karl (Mon); and Nadjesda Pavlova, Njstscheljev Gordjev (Tue) at the Volkoper.

PARIS Ballet Sables: La Bayadère and Covent Garden's production of Tchaikovsky's Tempest, choreography for both by Rudolf Nureyev. Les Mirages, choreography by Serge Lifar, and No Man's Land, choreography by Rudi van Dantzig, followed by Marco Spada - a three-act ballet-pantomime, in Rome Opera's production, adaptation, choreography and decor by Pierre Lacotte. John Lanchbery conducting at the Paris Opera - Salle Garnier. (742 5750)

Claude Debussy's La Damselle Elie inspired by Roger's The Blessed-Damozel in a double-billing with Puccini's Dido and Aeneas in a new production with Jessye Norman as Dido, Christine Barbaux, Veronique Dietrich as Belinda and William Stone as Aeneas, with Jean-Claude Casadesu conducting at the Opera Comique-Salle Favart. (296 0811)

Momix Dance Theatre with its improvisations and sense of humour, its shadow dancing and a quartet on skis gives an early evening performance at the Théâtre de La Ville (274 2277)

Borodin's Prince Igor - concert version by the orchestra of Sofia Opera conducted by Roustan Raychev continues the Russian season at the TNP-Chatelet (234 4444)

NEW YORK Metropolitan Opera (Opera House): The season's first performance of James Levine conducting Don Carlo, with Monserat Caballe and Giacomo Aragall as the romantic leads and Tatiana Troyanos as Princess Ekhlilights a week that also features Gian Carlo Menotti's production of Manon Lescaut as well as Piero Fagnoli's new Francesca da Rimini conducted by James Levine with Renata Scotto as Francesca and Plácido Domingo as Paolo. Lincoln Center (800 9630)

A Night in Venice (Eastside Playhouse) Alice Hammerstein Mathias's lyrics accompanied Strauss waltzes for the Light Opera of Manhattan's view of romance at Carnival time. Ends April 22, 334 E. 74th (861 2288)

Paul Taylor Dance Company (City Center): The nearly month-long season of mixed repertoire features premieres of Paul Taylor's Byzantium set to music by Varese and Equinox set to Brahms, along with revivals of Big Earth, Profiles, Ruses and Nightshade. Ends April 15, 55th E. of 7th Av (581 1907)

LONDON Royal Opera, Covent Garden: Bellini's I Capuleti e i Montecchi, Bellini's

Romeo and Juliet receiving its first staging from the Royal Opera, has Agnes Baltsa and Edita Grubirova as the star-crossed lovers, Riccardo Muti as conductor, and Pier-Luigi Pizzi producing his own designs. The latest revival of the aged and near-decapit Zeffirelli production of Rigoletto introduces Sherman Milnes in the title role, with Alda Ferrarini as Gilda (London debut) and Dennis O'Neill as the Duke, Edward Downes conducts.

English National Opera, Coliseum: War and Peace, the company's famed Prokofiev spectacular, returns for a London showing before the company's U.S. tour. A familiar cast headed by Eileen Harman, Kenneth Woolman, Norman Bailey and Malcolm Donnelly is joined by Russell Smythe, the new Prince Andrei; James Lockhart conducts.

Sadler's Wells, Rosebery Ave: Ballet Rambert ends its season at Sadler's Wells with a triple bill on Friday and Saturday.

Royal Opera House, Covent Garden: Royal Ballet offers a triple bill on Friday and Wednesday.

Albert Hall: Starting on Tuesday for a week, that great skater and ice dancer John Curry is to be seen with a company and a good orchestra.

Royal Opera House, Covent Garden: The Royal Ballet triple bill on Wednesday brings back the soggy Midsummer, staged earlier this season.



Alex Mavrocordatos, Lizza Aiken and Andrzej Borkowski

Music/Monday, Opera and Ballet/Tuesday, Theatre/Wednesday, Exhibitions/Thursday, A selective guide to all the Arts appears each Friday.

Table Treasures/Brussels

Rob van Mesdag

HOW the eating habits of the affluent have changed, from Roman times to the present, is colourfully displayed at the exhibition "Tresors sur Table" organised by the Credit Commercial in Passage 44, until June 24.

The Romans dined lying on the floor, a custom never brought back until now, while their "triclinium," a room reserved for eating, and their small, round, richly decorated tables did return to fashion in the second half of the 18th century.

During the intervening thousand years, banquets were held in halls or living quarters of castles or buildings, with tables consisting of boards laid across trestles. Guests sat on one side of the table enable servants on the other to respond to the diners' every demand.

French and German prints of the 15th and 16th century illustrate the prevailing customs. Most important was the seating plan, strictly according to rank; and proper eating manners, though crude in present eyes, were considered so necessary that in 1530 Erasmus, the Dutch humanist, wrote: "It is discourteous to lick one's grease-covered fingers or to clean them using one's coat. Better is to take the napkin or tablecloth."

Forks, plates or glasses were not in evidence, so - as is shown in the exhibition - meat was brought to the mouth with the aid of pointed knives. One ate out earthenware dishes and drank out of cups, filled from jugs. In the 18th century tableware became more refined.

On loan from the Musée du Verre in Liège are 17th century Venetian dishes and bowls with intricate cut-glass schemes, amber-tinted vases, and glasses with serpent-shaped stems. Beauvais, Nevers, Rouen, Marseilles were some of the centres for earthenware manufacture.

There are 19th century dishes and bowls from Beauvais with animal designs and images, and jars, with or without lids, from Cologne. Arriving at the Renaissance, the exhibition begins to take on more colour because the ambience of a festive table - with gold and silverware, European porcelain and flamboyant centrepieces - became as important as the food.

Purpose-built dining tables began to appear, as did dining rooms - or reappear, if one remembers Roman times. Forks replaced fingers and the points of knives became rounded to prevent guests from picking their teeth with them.

On display are silver tankards from Nuremberg; silver teapots, caddies and salt cellars from Brussels, and cutlery - forks with two prongs only - from the Netherlands.

After kaolin was first used in Europe in 1709, tableware made of porcelain began to replace earthenware. The first "china de commande" (ordered in Europe for manufacture in China) which had hitherto been the only china on European tables. Interesting to compare are a dish and plates of "china de commande" from the second half of the 18th century, with a soup tureen and bowl with lid from the same period made in Sévres.

Such porcelain found its match in table centrepieces from that period. The purpose of these was to please the eye, which is still true when admiring a landscape made in silver, with multi-coloured fruit in porcelain, covered with bright enamel leaves, made in Vienna in around 1740. Most unusual is a porcelain two-tiered tray with "custard cups" made in Stoke-on-Trent in 1851, presented by Queen Victoria to Emperor Franz-Joseph and Elizabeth upon their marriage in 1854.

Most spectacular is an Empire style table, complete with elaborate centrepieces, gold-plated plate warmers; all cutlery to the right of plates only, as was the custom.

WORLD VALUE OF THE DOLLAR every Friday in the Financial Times

THE MANAGEMENT PAGE: Small Business

A family business

Secrets of survival

Tim Dickson reports on Ireland's oldest linen company

HOW does a textile business survive for 250 years, remain throughout that time under the ownership and management of its founding family and still look forward with confidence to the 21st century?

Wallace Clark, sales director of Ireland's oldest linen firm, probably knows more answers to that question than most. For Clark has not only been a principal architect of the recent changes at Wm Clark and Sons of Upperland, County Londonderry, he has also written an entertaining history of his forebears' achievements, which contains some valuable insights into how a family business can be run successfully.

Luck, he candidly observes, has inevitably played a major part over the years and he pays tribute to (among others) his great-grandfather, Alexander the Sealmaster, who was not so great, with the result that the business did not over-expand in the Napoleonic War.

But good fortune is not enough if you want to last 10 years, let alone 10 generations (which with three younger members of the family in the business is Wm Clark's current tally). Much more important are the twin abilities to move with the market place and to respond to technological change.

Appropriately enough, these threads run out only through the years from Jackson Clark's decision to put in water-driven machinery in 1740 to the post Second World War expansion in household textiles. They are an important theme in the latest, and so far largely unchronicled, chapter of the firm's history from 1960 to the present day.

been forced to adopt—Clark's workforce has fallen from 350 to 220 in the last couple of years—the company expects to be back in the black for the 12 months to end March 1984. Significant investment in the production and marketing of textile wallcoverings, moreover, has recently paved the way for what Clark hopes will be expansion in a growing world market (notably in North America).

The story of Clark's "fusible interlinings" (which currently account for about £3m of the group's £5m of sales) is also the story of Everbond, a London-based marketing subsidiary set up in 1963 to exploit what was then a very new idea.

Tailors' interlinings, the material placed between the outer fabric and lining of a garment to enable it to retain its shape, the "cheat" of the industry, Wallace Clark puts it, have been a speciality of Wm Clark and Sons since the business was founded in the early 18th century (while the letterhead evidence has shown that trading on an ad hoc basis had begun before that date).

Until the 1950s, stiff linen with perhaps a little starch was the ideal material for interlinings but as houses and cars began to be better heated after the Second World War and the use of air conditioning reduced linen's inherent advantage of stability, the trade turned to softer fabrics (e.g. wool and hair mixture) including those of the "fusible" or "heatseal" variety.

"Fusibles" which were first made in the late 1950s—coated with adhesives, laminated to the outer fabric (usually on a press) and involve less tailoring skill and more control than the old "sew-in" system.

Staffer, the publicly quoted company which went into liquidation in 1979, was the unchallenged market leader in fusibles; but on a smaller scale Everbond was among the earlier European companies to respond to this new technical and marketing change.

The result today is that Ever-

bond is one of the European leaders in what is a highly competitive business—a consequence, Wallace Clark believes, of the company's high quality technical support and the technical know-how of its sales team.

But while the disappearance of Staffer offered a short-lived bonus—and an opportunity to grab new customers—competition for fusibles from French and German importers such as Kufner and Lainier de Picardy has clearly been intense. (This is compounded by the continental tendency to target their sales drive on a handful of large potential customers.) The traditional side of the business—tea towels, table cloths, etc.—continues to fight it out for relatively low margins with other Curtail rivals while BWC, a joint venture with a German company, has been turning in healthy profits making polyester imitation fabrics.

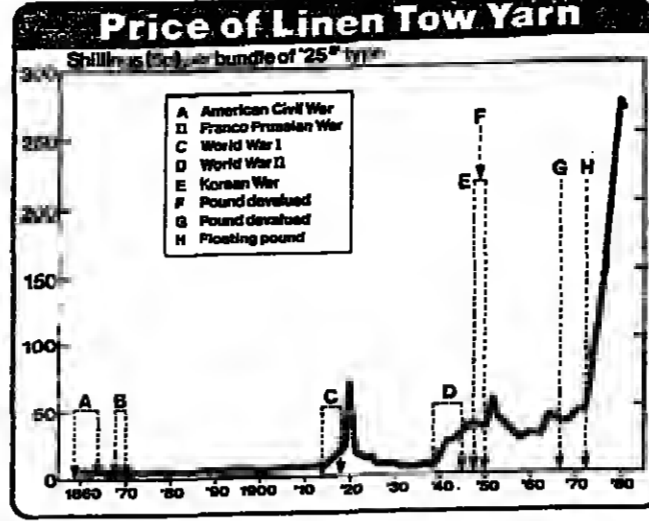
In what inevitably remains a generally hostile trading environment for textile manufacturers, Clark is pinning much hope for the future on increased sales of wallcoverings. Showing again his ability to find new ways of making money, the company's new collection has been developed to take advantage of many of the same coating techniques used for fusible interlinings; they have been adapted to laminate decorative yarns onto paper.

With the product's up-market appeal Clark hopes that this relatively new activity can bring higher margins as well as higher sales.

Family businesses are often derided by academic economists, who argue that prime- generation is not the best way to ensure competent management succession.

In Clark's case, however, the family's ability to retain control through thick and thin—and thereby control its own destiny—has almost certainly not been a significant factor in the company's survival. Many small and medium-sized textile businesses—notably in Northern Ireland—were swallowed up by large groups such as ICI and Courtauld during the post war boom only to be sold down when the going got tough.

As Robert Franks, of Inter-



Wallace Clark: the ninth generation of family control

national Linen Promotions points out, "For many reasons—good and bad, a lot of companies have been closed down by the parent. Come hell or high water—through boom and slump—Clarks have managed to keep their independence."

Dallas and Porsche type feuds seem to have been avoided and to this day no shares have left the family or its close associates. (Norman Crawford, the current chief executive, was the first "outside" Board appointee when he was hired in late 1982 after the sudden death of the then chairman and finance director, Billy Clark.)

Explaining why outside capital has never been needed, Wallace Clark says the company's distribution of profits has always been "cautious," the temptation to buy property

was fortunately denied a ruraly based business, and the support of Northern Ireland's various industrial development agencies has also been crucial (particularly a package from the Industrial Development Board during the recent recession).

There is, however, no simple answer to the original question, save Clark's observation that "longevity of individuals has been important, and the siring of a son or two of ability in each generation—one who doesn't mind getting his hands dirty." Perhaps there is another clue in his obviously sincere conviction that "a company with no respect for its past does not deserve a future."

\*Linen on the Green, an Irish mill village, 1730-1982. By Wallace Clark, available from Century Press, Alnbrook Road, Belfast. Price £7.95

To trade or to manufacture

BY DAVID HELLIER

EXPORT award-winner Frank Howard has a crucial decision to make. Should he continue running his three-man operation as a trading company or should he take the plunge into manufacturing?

Howard's company, Mostyn Chemicals, distributes chemical products for agricultural, public health, industrial and veterinary uses to around 30 countries—and exports account for more than 80 per cent of his £2m annual sales.

It is for this performance that Howard has just become one of three BOTB export award winners—in the first year that companies in the service sector have been included.

His present dilemma arises from the attitude of potential customers in some of his overseas markets towards middle-men. "Pressure has tightened up on some markets from governments and large purchasing organisations to buy only from manufacturing companies," says Howard. This is making it difficult to secure future contracts, and is a situation he clearly finds inequitable. "A multinational does not always manufacture its own products, but its status is never queried," he remarks.

"We may be forced into manufacturing, and it's a decision I would prefer not to have to make," says Howard. The problem is one familiar to many other small firms, and is just another of the many hurdles faced by small exporters.

deal directly with the manufacturer. "This policy is more pronounced in some countries than in others but there's nowhere that the bias does not count." Royce makes the point, though, that while a feeling exists that "all middle-men are in it for a big rake-off," their special knowledge "may work to the advantage of the buyer."

If a successful trader does feel under pressure to go into manufacturing he should think very carefully before doing so, suggests Royce. "It does not follow that a man who is good at selling is necessarily a good manufacturer. He might be more effective continuing as he is."

George Salt, North-West regional director of the British Overseas Trade Board, reckons that it is a question of swings and roundabouts for a small trading company. Such a concern "has the advantage in that it can put a package together quickly and can deal in small quantities," he says. In some countries, though—like Iraq—they "just will not deal with a middle-man. There, agents are taboo. It's just the way of the world."

Not that the way of the world has been too unkind to Howard's company so far. Mostyn's turnover has increased from £577,000 in 1982 to more than £2m a year in 1984. "Although many countries have strict requirements, you should not immediately admit defeat. You have to be tenacious and keep going," he says. Since starting his own company in 1979, Howard has worked closely with Salt's BOTB office in Manchester.



Frank Howard: "A decision I would prefer not to have to make"

And last year a lead from BOTB about an agent in South Korea who wanted veterinary insecticides led to a £250,000 deal.

Howard thinks his success is due to his company's flexibility, and his own technical knowledge. "Trained as a chemist at the University of Manchester's Institute of Science and Technology, he also worked for nearly eight years at Allied Colloids near Bradford, which supplies specialised chemicals for coal treatment."

Throughout this time he never gained any experience of running a manufacturing company and he does not really wish to venture down that road now. "Once you have a production operation, it has to keep going continuously and there are strains on management. But we may be forced into providing physical proof of a works in order to get orders," he adds wryly.

In brief...

TRAINING for management of small firms is becoming widely recognised as more than a means of developing executives' abilities. The increasing number of evening, weekend and even residential courses run by schools and polytechnics plays an important role in linking the lonely entrepreneur to his local network of supporting agencies. There is thus bound to be considerable interest in a

new report commissioned by the UK Organising Committee for the European Year of Small and Medium-Sized Enterprises which criticises "the fragmentation and lack of direction of Government policy" and calls for a separate management training division within the Department of Trade and Industry. The article of the discussion paper—by Barry Baldwin of Price Waterhouse and Sue Palmer of ICFC—highlights the opposition in universities and polytechnics to devoting more resources to

management training. They call for more "tenured" posts to replace the temporary appointments and secondees from industry and advocate a local co-ordinator in each part of the country. The principal message is that more money should be put behind the efforts of Government and academic institutions to reach a far wider audience. \*Copies available from Bill Poeton, 21 South Terrace, London SW7. Tel: 01-589 1945. T. D.

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# WEST GERMAN MOTORCYCLE INDUSTRY

## BMW bucks the trend

By Alan Wraight, recently in West Berlin

SENTIMENTALITY is not often linked with spending as much as DM 350m (\$135m). Yet it is one reason given by Bayerische Motorenwerke (BMW), the West German automotive group, for already putting DM 300m into modernising its motorcycle factory at Spandau, West Berlin, and committing a further DM 50m for investment over the next two years.

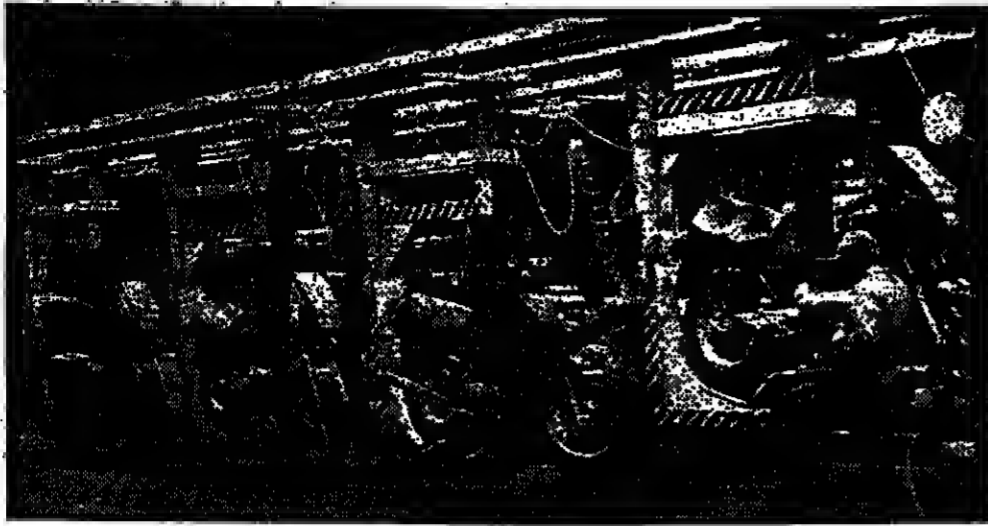
This is in stark contrast to the production cuts made recently by the rest of the world's major motorcycle manufacturers in the face of tumbling sales. It is even more adventurous that the group should commit such a large percentage of its capital investment programme, totalling DM 900m in 1983, into a side of its business which plays so small a part of overall vehicle output.

Last year BMW car production totalled around 420,000 units with a turnover of DM 14bn. However, the Berlin factory, which produced 28,000 motorcycles, had a turnover of only DM 500m, and about one-third of this was generated by car parts which are also made at the plant.

The company is currently losing money on its motorcycle operations—though it declines to specify just how much. It says that with its new investment it will go into the black this year. Certainly, sales of its new K series seem strong. In the UK, for example, BMW bike sales have doubled in the first three months of this year compared to 1983 and in Germany the top-of-the-range K1000s model is sold out until August.

The decision to press ahead with modernising the factory must have been made easier by tax concessions obtainable on investments in West Berlin. Nevertheless the figures demonstrate how difficult must have been the choice, made in 1979, between either pulling out of motorcycles—a traditional loss-maker—altogether or investing heavily in a new generation of bikes to supplement the existing range of flat-twin cylinder engine machines, the basic design of which had not changed in the previous 56 years.

Herr Hans Glas, director of the factory, explains that it was



BMW's motorcycle factory in West Berlin

here that sentiment played its part. The company started in 1923 as a bike producer, and the only major difference is that they have a fairing (racing-style fibre-glass streamlining). Yet customer demand is running 50 per cent for the RS, 40 per cent for the RT and 10 per cent for the standard version.

The new Spandau production facilities, inaugurated last month by Dr Helmut Kohl, the West German chancellor, are now the most modern for motorcycles in Europe.

Robots are being tried out at BMW's separate frame building works but the company is concentrating on the use of computerised, numerically-controlled machining operations, a method Herr Glas describes as more in line with BMW's reputation for high engineering standards.

This year BMW plans to produce around 32,000 motorcycles at Spandau, its only factory. The company says that at this level the bike side becomes profitable. Output should increase to 45,000 in 1985.

Of bikes built in the current year, about one-third will be powered by the flat-twin engine and the remainder by the new K series 1,000 cc water-cooled four-cylinder power unit, production of which is planned to rise to 30,000 a year by 1986.

Herr Glas refuses to be drawn on plans for any additions to

the company's bike range. However, beneath one of the factory's coloured production diagrams, a legacy of Dr Kohl's visit, castings for three-cylinder crankshafts were clearly visible. So new models are clearly on the way, which could obviously lift production targets higher.

Some 1,800 people are employed at the Spandau works, 600 of whom are involved in car part activities. With sales of the K series already looking healthy, the plan is to employ a further 180 workers on bike production.

Around 60 per cent of output goes for export to 180 countries—between 10 and 15 per cent of this for government and police use. Very encouraging sales reports are being received world wide for the new K series, according to Herr Glas, and shipments to the U.S., BMW's most important export market, have yet to begin.

Demand for the new models could, therefore, rise sharply. But the governing factor on meeting this is the factory's paint shop. Machine output could be doubled by switching from the current one shift, producing 180 bikes per day, to two shifts. However, to cope with more than 45,000 bikes per year the paint shop must wait for its DM 40m improvement programme to be completed, and that is still some months away.

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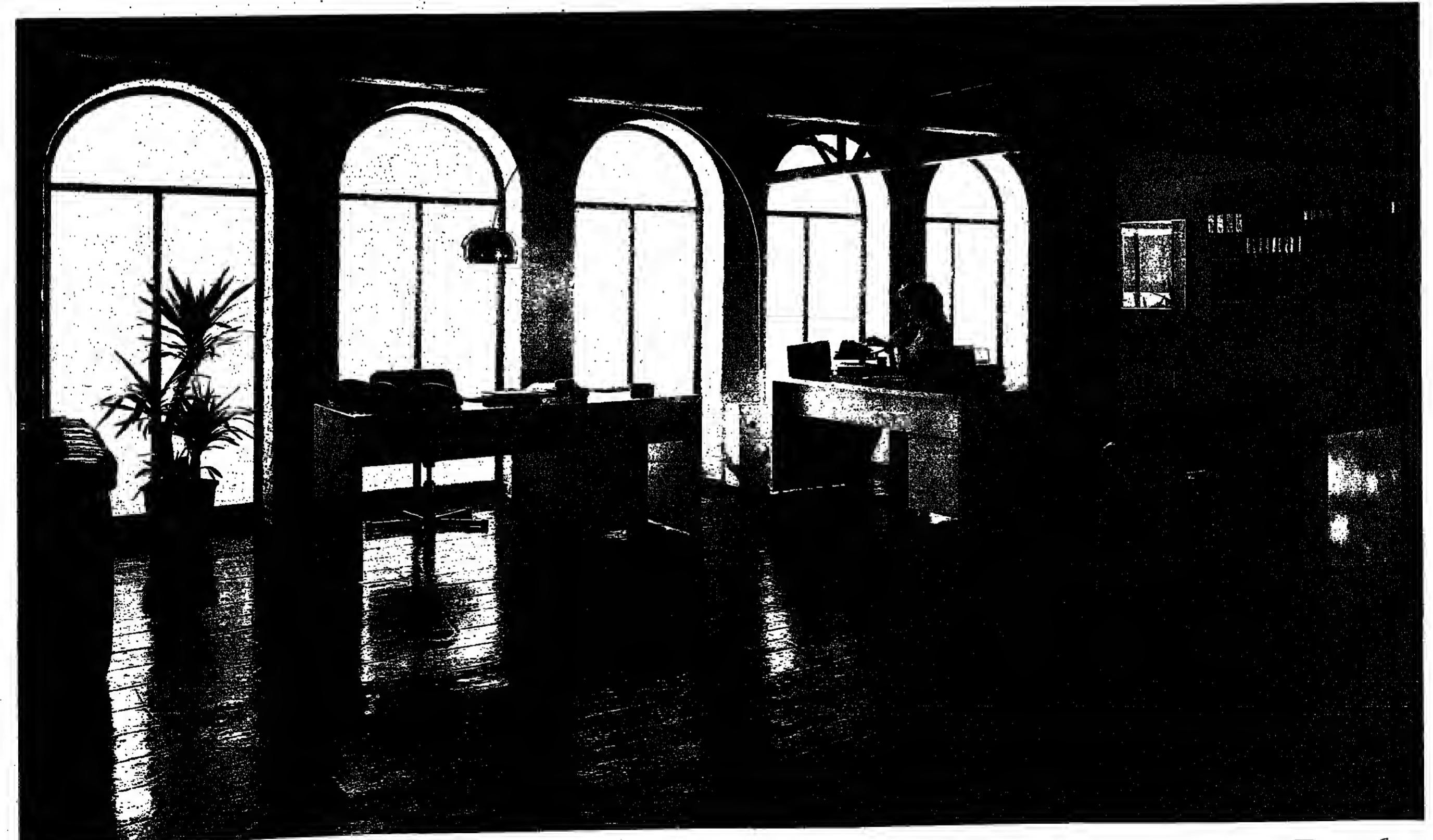
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FINANCIAL TIMES BRACKEN HOUSE, CANNON STREET, LONDON EC4A 4BY

Tuesday April 3 1984

Confidence in Zimbabwe

THE NUMBER of countries in black Africa which can boast that they pay their bills on time can practically be counted on the fingers of one hand...

Fiscal discipline

Nonetheless, what Zimbabwe has chosen to do is restrict private sector resources in order to protect payments on a rapidly increasing public sector debt...

Fair taxation for women

MANY ASPECTS of the UK tax system are outdated and illogical and few more so than the current taxation of husband and wife...

Flaws

The legislation as it stands has several flaws. Quite apart from treating the wife as her husband's chattel, it allows her no privacy in her financial affairs...

THE Common Agricultural Policy is like a supertanker. We have turned the wheel at last and now we must wait to see how long it takes to respond...

EEC Agriculture

Europe sets out on the road to reform

Ivo Dawney in Brussels reports on the implications of the Farm Ministers' new agreement on agricultural prices and production

But the overwhelming opinion was that more will have to be done in the coming years if permanent controls are to be achieved on what for 20 years have been open-ended commitments to price supports...

Mr Michael Joling, the UK Agriculture Minister, has repeatedly suggested that funding the prices and reforms package should be within the current budget...

Britain is also likely to use the carrot of a final settlement of the issues outstanding from the abortive Brussels summit to reinforce its argument for strict controls on future agricultural spending...

First and foremost, the agreement has made clear that farmers can no longer expect open-ended guarantees of support for their products...

Secondly, it has established that economic stringency and the need to control spending mean farm incomes must, when necessary, take second place to the delicate balance of consumer and Community needs...

Rosen ventures abroad

Ben Rosen, now something of a legend in the Californian venture capital scene, was in London yesterday to launch the UK subsidiary of what is claimed to be the fastest growing company in U.S. corporate history—Compaq Computer Corporation...

Rosen offers no comment on reports that he has become a millionaire overnight since starting his venture capital company with L. J. Sevin (ex-head of Mosek, the semiconductor company) in 1981...

Call of the wild

The World Wildlife Fund turns today to the somewhat unlikely source of the City of London for the new chairman of its UK organisation...

significant changes have been made. But equally there remain major reservations over the stringency of the measures taken and the inevitable revaluation of the ECU...

The agreed system for removing the MCAs involves what is effectively a 3 per cent revaluation of the ECU, creating a green rate for the currency in which farm prices are fixed by the Community...

This solution ensures that German farmers, and those in the UK and the Netherlands where subsidies for exports are currently in force, will suffer no nominal loss of income...

Further, when the German MCA is reduced to zero through a further 7 per cent cut over the following two years, the new Green ECU will effectively be aligned on the DM...

adding to an existing butter mountain that is nearing 1m tonnes. Every tonne of the surplus sold on the world market requires a £1,000 export subsidy...

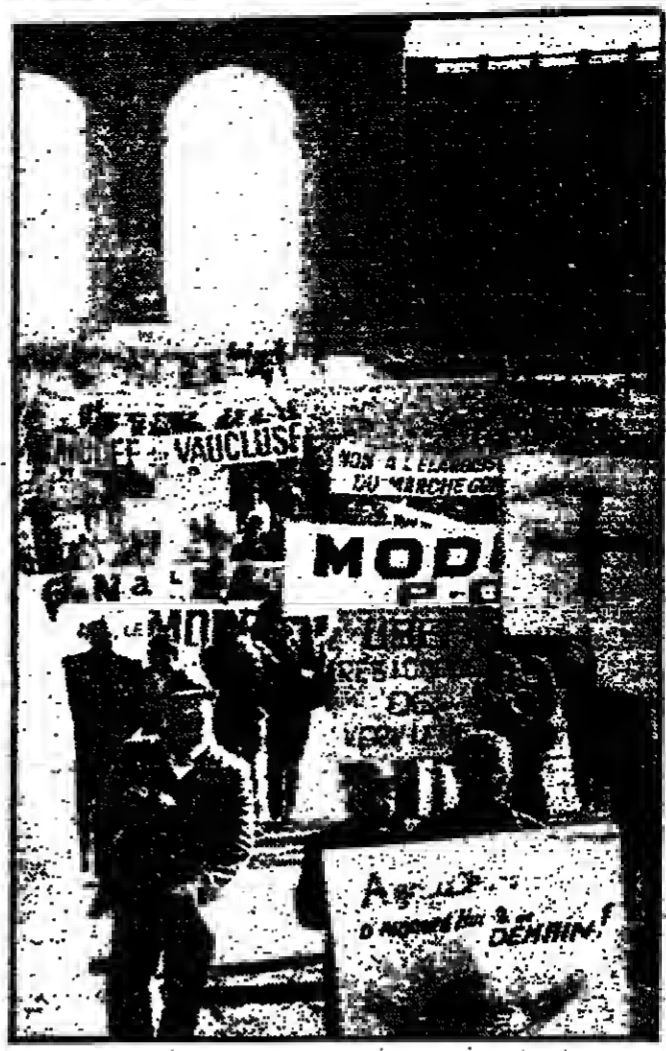
Hardest hit will be countries with many small producers, such as France, Italy, West Germany and even Ireland, despite Dublin's success in winning an exceptional 245,000 tonnes extra quota on top of its 5.3m tonnes 1983 production...

Mr John Walker, chairman of the UK's National Dairy Producers' Association, warned at the weekend that up to 10,000 farmers jobs were now at risk...

HOW PRICE CHANGES COMPARE

Table with 4 columns: Country, Average % change in prices paid to farmers, Expressed in ECUs, Current national currency, Current inflation rate. Includes Germany, France, Italy, Netherlands, Belgium, Luxembourg, Ireland, Denmark, Greece, Common Market.

\* Including the alignment of Greek prices with Community prices. Source: EEC Commission



Before the decision: farmers demonstrate in Brussels against the expected subsidy cuts

per cent cutback under the agreement with exemptions for pasta-making durum wheat and rye (a last-minute concession to the Germans)...

Reducing cereals prices to world market levels has long been an article of faith for the European Commission, but attempts to do so have so far been ineffectual...

Moreover, farmers have done everything to conserve quantity at the expense of quality. As a result a large portion of wheat produced is unfit for human consumption, yet overpriced as animal feed...

Assuming the British budget deficit problem is by that time resolved, the pressure for another gargantuan effort of collective political determination looks slight...

The logical answer is to cut

Community prices substantially, and indeed some agricultural economists believe that the knock-on effect in cheaper meat and poultry prices could in itself have major consequences for the reform of the CAP...

But such a move is deemed politically unacceptable by a broad alliance of countries, including the UK, Germany and France...

Attempts to contain cereals substitutes imports have been opposed by the British as a dangerous provocation to the U.S. the main corn gluten food exporter...

Other products—the Commission's general bracket for everything outside the milk and cereals regimes—have broadly suffered a 1 per cent price cut...

Ministers also failed to tackle a major reduction in the price of beef—despite 400,000 tonnes mountain and more in the pipeline through enforced slaughtering by dairy farmers...

Just as the new milk restrictions are pitched too high, so in the past have thresholds on intervention levels for grains...

Nevertheless, this overspending will have to be tolerated. The Commission's release of the main issue is how much political will is there for further controls...

As the past few months have once again demonstrated, the EEC only seems capable of taking major decisions in a crisis.

Men and Matters



The government is trying to set us an EEC grant to reopen as a milk bar

wildlife to the point where his Wildlife home now houses one of the largest private animal collections in Europe...

about to be reborn, murmuring with impeccable corporate soundness that deals need to be based on more than good tax matching...

But on one point he has not changed his mind. There will be shake-outs in the North Sea, he says, and it will be the companies with the strongest asset bases and the best management which will survive...

Wide spread

Guernsey has loosened its road regulations a fraction to accommodate an embarrassing case of "middle-aged spread" that threatened its summer bus service...

The trouble began when Guernseybus, an offshoot of the UK-based Trafalgar Leisure International group, bought 12 ex-London Transport buses to replace the most venerable of its fleet of vehicles...

At first, the single-deck, 40-seaters seemed ideal. The steps were lower, the seats more comfortable, and the width of 7ft 6in complied exactly with the maximum allowed on the island roads...

Then it was found that the secondhand buses had acquired a bit more girth than their original specification because of engineering tolerances and settlement during their seven years of London life...

The extra width in some cases, as Guernseybus managing director, Barry Spears puts it, was "no more than a coat of paint." But the buses were banned from the roads...

Guernsey's parliament has now agreed that buses built to the 7ft 6in limit should be allowed a legal spread of up to 1in more...

Ruling the roost Heard in Chelsea: "She's a very clever young woman—she married a night-owl and turned him into a homing pigeon."

Taken aboard

Latest recruit to the good ship Enterprise, the Government's oil-company-in-waiting, due to be floated in the next month or two, is Martin Lovegrove...

Lovegrove, aged 33, started work at Enterprise yesterday without so much as an announcement. He has been seconded from brokers James Capel for six months to help the new board work out its corporate strategy...

That, so far as the City is concerned, is shorthand for mergers, since cash-rich Enterprise has what is known as a tax problem: too much taxable production and not enough tax-offsetting exploration...

Lovegrove, ex-BVOC and UK Wood Mackenzie, has some experience in these matters having attempted a couple of years ago, during his time as a consultant, to set up the little-known Zeus project...

Zeus was Lovegrove's grand design for marriage-broking the tax positions of the smaller North Sea players, especially what he calls "the bottlers and yeast makers"—the non-oil specialists—into a more financially efficient whole...

It failed, but even his competitors admit, it had much to be said for it. Lovegrove is cautious, about any suggestion that Zeus is

Observed

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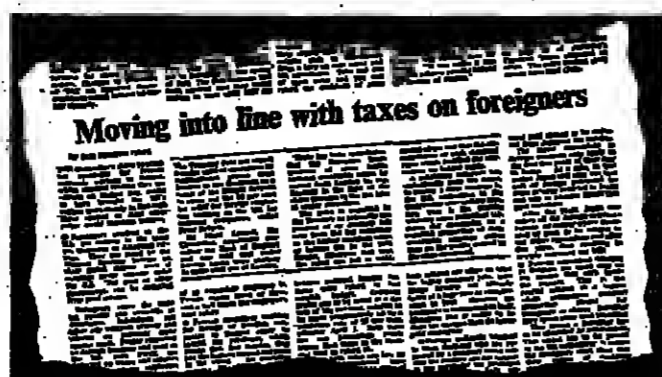


Letters to the Editor

Companies and employees

From Mr A. Horne
Sir—Mr McFarlane (March 30) is, of course, correct in stating that trades unions belong to their members...

democracy foisted upon them because they refuse to reform themselves so the European Commission proposals for statutory measures on employee participation are on the table...



Grossly unfair to foreigners

From Mr J. Rudolph
Sir—You state (March 15) in your report 'Moving into line with taxes on foreigners' that few other countries give foreigners any tax advantages...

still pay contributions into sickness insurance schemes in their home country because it is the rule there. They don't want to give it up because of the risk of being accepted again at a very much higher premium...

Rents in enterprise zones

From Mr L. Tooke
Sir—If D. B. Richardson (March 27) does not take advantage of the fact that some of his buildings are given a tax relief, then he must be a most unusual developer indeed...

From Mr H. Llew
Sir—If Mr Richardson's firm (March 27) is quoting similar rents for comparable properties both within and outside the Dudley enterprise zone then, either the rents quoted outside the zone are too high or his firm is forgoing the full market rent for the premises inside the zone...

Rules governing political funds

From Shelley Adams
Sir—Your leader of March 26 on the Trade Union Bill misses the main point behind the proposed changes to the rules governing political funds. They are nothing to do with democracy—quite the opposite—they are concerned with gagging political opposition...

they can cover the cost out of the general funds. The Trade Union Bill will severely restrict unions' freedom of speech and action and their right to state publicly their opposition to government policy...

Trading outside regular hours

From Mr H. Woolf
Sir—Mr J. D. Fletcher, Asda Stores (March 27), in support of Sunday trading, his spirited reply to Mr C. W. Paterson of the Retail Consortium, entirely confirms our views and experience on trading outside regular hours, over a period of many years...

"fixed" trade and, in deference to the logic, retail staff could go on a fully paid holiday for the rest of the week, costs such as lighting, heating and security would be cut to the bone...

Coca-Cola and Guatemala

From the General Secretary, International Union of Food and Allied Workers' Association
Sir—Certain points raised in the article 'The end of civilisation in Guatemala' (March 3) call for correction and comment. Contrary to what was implied, Coca-Cola is not pulling out of Guatemala. It operates two other plants in the country, one wholly owned at Retalhuleu...

Sach and Mendez, the shareholders of AICSA, are former Coca-Cola employees who were sent by Coca-Cola to take over EGSA in order to meet the IUP demand for recognition and protection of the union in 1980...

Timing tax coding notices

From the Managing Director, Tungan Hydraulics
Sir—Sir Lawrence Airey (March 29) states very clearly the position regarding the timing of the issue of tax coding notices. As always, however, the burden of the extra work which enables the Inland Revenue to operate the system with the minimum of cost will, in Sir Lawrence's own words, be handled by the employers who appear to be all too often taken for granted as unpaid tax collectors...

with the general view given by the Chancellor in his Budget of being in favour of reforming and smoothing out the operation of our tax systems over the next few years. I would have thought that the sensible solution to this question would be for the Inland Revenue to issue its instructions to employers relating to increasing tax codes resulting from Budget submissions between the date of the Budget and April 5...

Housing benefit: talk about kicking those who are already down!

From Mrs S. Simpson
Sir—I am a secretary who endeavours to read your paper every day at tea-break time after it is circulated to my two bosses. I buy it myself when on holiday, for I enjoy the way you present the news and give a very fair and balanced view, in my opinion, of all that is happening at home and abroad. I wondered if you would like to print a reader's letter to some of the other half live to bring to some of your readers the realities of life for the disadvantaged under this Government...

showed protests over the sacking of dinner ladies, who were to be offered re-employment at lower rates of pay. What happened to my son last week comes under this heading, in my view. He is 19, has never had a job, but did a YOP course for six months some two years ago. He suffers from a psychiatric illness and was receiving supplementary benefit of £24.55 per week. Under the new housing benefit scheme, this has been reduced by £3.10. Talk about kicking those who are already down!

In spite of that, I for one would be willing to pay more income tax than I already do (the PAYE kind with none of the expenses that those with tax accountants can get for them) and I would also be willing to pay more rates from my salary (which would probably not keep some of your readers in wine for a week) just to have the less fortunate and sick get the help they receive without cuts. We seem to be becoming a nation of the selfish and the Government seems to be doing its best to keep those with no muscle in a sorry plight. Doing away with wages councils is just another example of putting the boot in on the low paid. I do hope the Government won't forget though that we still live in a democracy in spite of some freedoms being eroded (eg. Cheltenham GCRQ and not allowing local government, who are also elected, the right to decide locally how to manage their affairs). Any extreme Government, be it right or left, will find itself out of office when it tries to go too far. There are some in the Conservative party who see this, but they are replaced if in high office, or otherwise deal with it. I am not a believer in hand-outs when not needed. I brought up three children in the 1970s as a single parent and managed to pay a small mortgage and my bills without recourse to free school dinners or rates rebates, etc, but I don't mind those who need help getting it. It is a much fairer thing than reductions in income tax for those who are lucky enough to have jobs. Mrs S. V. Simpson, Mrs. Corrick Knowe Avenue, Edinburgh.

Britain's Clearing Bank Union

Enter the radical

By Brian Groom, Labour Staff

THE MAIN English clearing banks, says Mr John Cousins, will not delay much longer their onslaught on staff numbers. "They won't do it with malevolence, but they will want to reap the benefit of their investment."

The banks hotly dispute this interpretation of their intentions towards their 239,000 staff. But as the electronic revolution based on automated payments systems begins to take shape even some of the banks' most loyal employees are beginning to feel uneasy.

Many of them belong to the £7,000-member, non-TUC Clearing Bank Union. Mr Cousins, who became general secretary of the ultra-modern union two months ago, believes that "if his members do not seize the future, the future will seize them."

Mr Cousins is as assertive as the CBU's name. He cut his union teeth as an official of the Transport and General Workers' Union between 1963-75. His father, Frank, led the TGWU from 1968-83 and was Technology Minister from 1964 to 1966.

Aged 52, Mr Cousins joined the CBU from industry. Until recently he was director of personnel and industrial relations at John Brown Engineering. He has also been director of manpower and industrial relations at the National Economic Development Office and personnel director at Plessey. In choosing him, the CBU appears to be seeking to raise its low public profile.

He has radical ideas which may take some selling to a group of Britain's most conservative workers. Some bank executives believe the union was mad to pick him, and predict a fall for Mr Cousins down one of the many manholes which lie in his path. "He thinks because he's got a strong presence and is a likeable man he can come in and change everything," said one banker. "The CBU consists mainly of the individual staff unions at Barclays, NatWest and Lloyds, and much effective power has hitherto been within these rather than in the general secretary's office. The last incumbent, Mr Jack Britz, fell foul of them last year after policy differences with his executive. Mr Cousins last week negotiated his first manhole with-



Terry Kirk

Mr John Cousins, the new general secretary of the traditionally moderate Clearing Bank Union, is not for one minute suggesting that I am in the mould of Bevin. I do not have his burning ambition. But someone is going to have to help bring all the fragmented bits together. If the unions do not get themselves together, they will get nobbled," he says. "Someone once said, is not the TGWU too big? To an elephant, another elephant looks about right. If we are fragmented and tiny, we have not a cat in hell's chance of ever taking on the might of the powerful institutions."

The crucial question is: how on earth can a conservative union like the CBU provide the platform for a broad white-collar grouping in mainstream unionism? Its members have never been on strike, and are not even in the TUC. The short-term effect of the rift with Bifu is likely to be another twist in the spiral of inter-union competition. It is difficult to see a Cousins-led CBU staying meekly within its present confines.

Bifu, which has grown steadily by mergers with staff associations but has recently suffered bad publicity because of a dispute with its own em-

ployees, will face stronger competition for members across a broader spectrum of the finance industry.

The rift will not alter Mr Cousins' conviction that the CBU must assert whatever strength it can gather. Advancing technology threatens to bring radical change to the once paternalistic banking world, posing new challenges to the staff unions.

The banks play down the fears over job losses, pointing out that their combined staff numbers are at a 30-year high. Increases in business have more than offset the impact of labour-saving technology, they say.

But the growth rate has slowed sharply since the 1960s and early 1970s and even if this does not turn into decline, bankers accept that there will be great changes in the content of people's work.

Says Mr Cousins: "I am not sure whether the fifth generation thinking or analytic computer is a pipe-dream or not. But if it happened you wouldn't need bank people. You wouldn't even need bank managers. Technology would finally remove those decision-making processes."

Like many other trade unionists, he would like stronger trade union influence over the application of future technology. "In the 21st century we will not be working a 35- or a 40-hour week, we will be working two or three days at most and probably only 20 hours."

Come what may, Mr Cousins will try to raise the CBU's profile. It is the largest union in the clearing banks. It hasn't on my analysis played the leadership role. It has always been prepared to be the second union and I want to change that.

The CBU, formed from staff associations, is only four years old and still feeling its way. Its membership stuck at 93,000 for some time but last year it grew by 4,000, giving it more confidence. Says Mr Cousins: "It is potentially a very powerful force for making capitalist society work."

Whether its members want to be a powerful force of any kind remains to be seen. The decision to ballot on industrial action had Mr Cousins' personal stamp upon it, but even before it began bank executives were saying they believed the union was still a very long way away from winning such a vote.

Advertisement for Tandy computers. Top section: 'The Tandy TRS-80 Model 100 Portable Computer' with a photo of the device and 'Finalist British Microcomputing Award 1984'. Middle section: 'The Revolutionary Micro Executive Workstation For Office Or On-The-Go' with a price of £499 and features like 'Powerful Built-In Executive Management Software' and 'Large Display - 8 Full Lines of 40 Characters'. Bottom section: 'Tandy' logo and contact information for Tandy Corporation.

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## NEW YORK WILL BE CRUCIAL TEST IN PRIMARY BATTLE

# Underdog Hart strains at leash

By REGINALD DALE, U.S. EDITOR, IN WASHINGTON

"I AM the underdog, coming from behind." That is how Senator Gary Hart of Colorado has chosen to cast himself in the closing days of the great mauling and clawing battle for the state of New York - the outcome of which will be decided by the voters in today's Democratic primary.

The stakes in what has been pug-nacious and often unedifying contest are exceedingly high. If former Vice-President Walter Mondale beats Mr Hart convincingly and then follows through with a victory in Pennsylvania in a week's time, he will open up a lead in the race for the presidential nomination that Mr Hart will find hard to overhaul.

If Mr Hart wins New York, he will deal another costly and humiliating blow to a Mondale campaign that has picked itself up and doggedly regained its stride since it was first sent reeling by Mr Hart five weeks ago in New Hampshire. Although defeat in New York would not mean the end of the road for either of them, both men badly need to win.

New York has 285 delegates out of the 1,967 needed to win the nomination at July's party convention in San Francisco, and is the biggest prize in the race so far. It is second

only to California, which does not elect its 345 delegates until the end of the primary season in June. (Today, 252 convention seats are at stake, with 33 unpledged delegates to be chosen later by the New York state party committee).

But it is not just a question of numbers. New York contains a sample of virtually every kind of voter in the nation - from the upstate farms and mountain resorts to the rags and riches of Manhattan. It is a key state in any candidate's presidential strategy.

It is also a state that Mr Mondale, as the representative of the traditional Democratic constituency, ought to win. It is the most unionised state in the country, with a major unemployment problem, and Mr Mondale has the support of almost all the party's powerful establishments, including the two leading local heavyweights, Mr Mario Cuomo, state governor, and Mr Ed Koch, the New York City mayor.

The opinion polls have appeared to confirm both Mr Hart's own estimate of his chances and the now notorious volatility of this year's Democratic voters. Mr Hart was up to 18 points behind Mr Mondale 10 days ago, but narrowed the gap to 10 points and then to five last week,

only to see it widen to 13 points at the weekend and then narrow again to 11 points yesterday.

All the signs are that people are not finally making up their minds until the very last minute. New York voters also have a long history of support for the underdog and independence from the political establishment.

In 1980, Senator Edward Kennedy closed an enormous gap in the final weekend and went on to a landslide upset over President Jimmy Carter. On Sunday, the canny Mr Koch said that, while he felt in his bones that one of the two would "win big," he could not say which one it would be.

It is not, of course, just a two-man race. The Rev Jesse Jackson, the third remaining candidate, is now publicly protesting, with considerable justification, that his two rivals are trying to squeeze him out. "Walter Mondale and Gary Hart," he told black voters angrily at the weekend, "would prefer to pretend that you and I do not exist."

Mr Mondale, perhaps, could be excused for wishing Mr Jackson out of the way. Many of the black voters who have turned out in throngs for Mr Jackson would otherwise have been Mondale supporters - Mr

Hart has so far made little impact on blacks - and Mr Jackson looks set to score heavily again today.

The latest poll showed him with an impressive and rising 22 per cent of the state's total vote.

To many New York voters, Mr Jackson's performance over the last few days has looked mature and dignified compared with the mud-slinging antics of Mr Mondale and Mr Hart. The two leaders have been showing the emotional and physical strains of a tough and exhausting campaign.

Mr Mondale has sifted endlessly through Mr Hart's record and past pronouncements in an effort to highlight inconsistencies and what he calls "a peculiar pattern of mistakes and errors in foreign affairs."

The two men came close to insulting each other publicly in a nationally televised debate last week, in which they both virtually ignored a cool and collected Mr Jackson.

Mr Hart has run a controversial but effective television advertisement featuring a burning fuse, in which he urges the viewer to remember Vietnam and suggests that Mr Mondale's Central American policies are just as likely as President Ronald Reagan's to draw the U.S. into another war.

## British politicians angered by Community farm deal

By Peter Riddell, Political Editor, in London

THE British Government is facing mounting criticism over its handling of relations with the EEC from two sections of the ruling Conservative Parliamentary party - the long-standing opponents of Britain's membership of the Community, and members representing farming interests.

Mr Michael Jopling, Agriculture Minister, yesterday came under wide attack in the House of Commons over the weekend EEC farm deal. He claimed it was "fair and realistic" though he admitted it was doubtful whether agricultural spending in 1984 could easily be met within the budgetary provisions.

The European Reform Group of Conservative members opposed to Britain's EEC membership, which claims the sympathy of 40-50 MPs, is hoping to enlist the support of disgruntled farming MPs in order to resist any further increases in the Community's resources through rise in the 1 per cent VAT ceiling.

Mr Jopling yesterday drew only lukewarm support even from pro-EEC MPs and there was outright hostility from many farming members. Sir Peter Mills, a former junior agriculture minister, warned of the possible "disastrous effects" on very small dairy farmers, while Mr Ralph Howell said there had been "a feeble settlement" as far as the dairy industry was concerned. Mr Neil Hamilton, from Cheshire, warned that a great many dairy farmers in Britain could go bankrupt.

Opposition agriculture spokesman Mr Robert Hughes said the deal was "a far cry from what farmers and taxpayers. He said it did not represent fundamental reform but was merely an exercise in book-keeping.

Mr Jopling said he would be discussing the details of the agreement with the National Farmers Union and the Milk Marketing Board, and promised farmers would be given information on the new superlevy on milk production as soon as possible.

Seeking a smiling stand on IDA, Page 2; Reforming EEC agricultural policy, Page 16; Commodities, Page 34

## THE LEX COLUMN

# Charity begins in Buenos Aires

Interest payments from Argentina began flowing into international banks yesterday for the first time since last October as the surprise rescue package launched on Friday night by the U.S. and four Latin American governments was implemented.

But while the package has averted a crisis in the March balance sheets of U.S. banks, it has left some lenders feeling distinctly uncomfortable about its longer-term implications.

A positive feature is the willingness of Mexico, Brazil, Colombia and Venezuela to chip in with \$300m of their own money to help keep the world's financial system on the rails. Now they, as well as bank lenders, have a vested interest in seeing that Argentina does carry out its promise to reach agreement on an economic adjustment programme with the International Monetary Fund (IMF). For banks with exposure to Latin America this is a very encouraging development.

It shows that debtors are prepared to act together to support the combination of bank finance and IMF adjustment measures that have been used to patch up the debt crisis so far.

This has not been achieved without a price. Leading creditor banks have been obliged to come up with \$100m of bridging finance at a tiny margin of 4 per cent over Libor. In the process, their resolve not to lend to Argentina without a prior IMF agreement has crumbled. This is a precedent which suggests that brinkmanship of the type Argentina has been displaying in dealing with its bankers can pay off.

The Latin American governments concerned must have known this when they proposed the package last week. By pushing it through they have weakened the longer term bargaining position of banks at the negotiating table in a way which is likely to accelerate the present trend to lower margins and longer maturities in future debt reschedulings.

Not so long ago, a prolonged silence from Kleinwort Benson during a period of rapid structural change would reasonably have been interpreted as evidence that the bank was doing through the storm. But Kleinwort has recently been shaking off its image as one of London's more somnolent merchant banks and, while it has yet to make an announcement of the 29.9 per cent variety, it established yesterday that it was indeed wide awake.

The purchase of AGS, one of the 37 primary dealers in U.S. Government securities, provides the bank with both a solid encampment in the heart of the U.S. debt markets and a useful training ground for combat troops in the London securities industry. Kleinwort clearly envisages becoming a principal in the gilt-edged market when the rules permit, and the AGS deal should help to further that ambition.

The bank has concluded that final capacity is likely to bring the London fixed-interest market closer to the model of Wall Street, a reasonable supposition, and is preparing itself accordingly. AGS has a remarkably flat profits record over the past three years, given the volume of Treasury funding, but Kleinwort is probably justified in paying a 50 per cent premium over the book value for one of the few remaining independent dealers. The U.S. authorities, meanwhile, have allowed one of the sops in their monetary machine, to pass into foreign ownership without a qualm - an interesting contrast to the Bank of England's protective approach to the discount houses.

Moreover, Reuters has also provided £19.4m below the line for deferred tax relating to allowances taken in previous years. This will have the effect of smoothing out Reuters' tax affairs: the company can be floated on the basis that there will be no unrelieved depreciation in the profit and loss account as the new tax regime settles in. The implications for actually payable tax are hard to assess - depending as they do on future investment and profits - but stated tax over the next few years seems likely to stick near its new higher level. If the Ebn price tag is to prove an interesting contrast to the Bank of England's protective approach to the discount houses.

## Oxy may sell 15% of stake in UK oilfield

By Richard Johns in London

Occidental Petroleum of the U.S. is exploring the possibility of selling up to 15 per cent of its 36.5 per cent interest in the Claymore oilfield in the North Sea, a disposal which could be worth more than £100m (\$144m).

Occidental declined to comment but Anvil Petroleum yesterday admitted it was one of a number of British independent companies talking with Morgan Grenfell, the merchant bankers Occidental has asked to evaluate the market and sound out potential purchasers.

Charterhall also acknowledged that it was one of a group interested in buying production to help finance exploration and development costs, and Pict Petroleum is reported to be one of an "informal group" of nine involved in talks which are said to be "at an early stage." Their requirements and resources could be more than 10 per cent of Occidental's share of Claymore, according to analysts.

Occidental's Claymore holding has been considered a prime candidate for a "farm-out" operation of the kind undertaken by British Petroleum last year when it disposed of 12.25 per cent of its predominant share of Forties field, realising £238m in the process. The field is producing just over 100,000 barrels a day. But its partners - Getty Oil (23.5 per cent), International Thomson (20 per cent) and Allied Chemical (20 per cent) - could benefit from a dilution of their holdings.

All are paying a high marginal rate of tax on production from a mature field without having sufficient exploration and development costs to set against it. Occidental, in addition, is known to be reviewing its operations worldwide and is still in the process of defraying the debt incurred as a result of its takeover of City Services.

Anvil, Charterhall and Pict are all in need of North Sea output for tax reasons.

The 1984-85 UK budget tightened up on the taxation of asset transfers in the North Sea and has slightly reduced the attractions of "farm-ins." But there can be considerable benefits in acquiring producing interests if future exploration commitments involve a significant amount of expenditure and the company has no taxable income against which to offset them.

New deadline for Dome, Page 19

## Workers' protests grow over French plan for steel cuts

By PAUL BETTS IN PARIS

STEELWORKERS in the depressed French steel region of Lorraine blocked the Paris-Luxembourg railway line and raided the Socialist Party headquarters in Metz yesterday as the French Government's steel industry restructuring plans continued to cause increasing political tensions inside the French left.

Following M Georges Marchais, the French Communist Party Secretary General, who condemned the steel plan at the weekend, it was the turn yesterday of the regional authorities of Lorraine to attack the restructuring. The eastern region of Lorraine has come out worst under the plan, which involves up to 25,000 layoffs in the industry between now and 1987.

As an eloquent sign of the emotions the restructuring has provoked in Lorraine, the bishops of the cities of Metz and Nancy agreed yesterday to allow church bells throughout the region to ring in solidarity with the general strike in Lorraine organised for Wednesday.

The mayor of Amneville also announced yesterday that his municipality was proposing to buy the hot roll coiling mill of Rombas, owned by the nationalised Saeclor steel group but due to be closed under the government steel plan. Dr Jean Kifer, the mayor of the town, said the municipality envisaged operating the mill as a mixed public - private enterprise. He claimed the mill was a viable asset.

The latest wave of criticism and unrest was described yesterday by M Max Gallo, the Socialist Government official spokesman, as an attempt by some "to manipulate the drama for political ends."

The Mitterand administration has so far indicated that it would not reconsider the plan. Indeed, the Government has shown a firm determination to press ahead with its tough economic austerity programme and unpopular industrial restructuring. Viscount Etienne Davignon, the EEC industry commissioner, expressed his support for the plan in a French newspaper interview yesterday.

But the Communists, the junior members of the French left-wing coalition, continued yesterday to attack the plan. M Marchais was due to outline his party's position on the controversial issue during a television interview last night.

The Communists at this stage appear reluctant to force a showdown with the Socialists, which could lead to their withdrawal from the French coalition. But the party is in an increasingly difficult position. Many political commentators in Paris describe the divisions between Communists and Socialists over the steel plan as the most serious rift between the two parties since the left came to power in France in May 1981.

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## W. German builders in pay deal

By Rupert Cornwell in Bonn

WEST GERMANY'S building workers have dealt a heavy blow to the campaign for a shorter working week by agreeing a 1984 national contract which offers a 3.3 per cent pay increase and the prospect of an earlier retirement age.

The deal between employers and nearly 1m construction industry workers was sealed in Frankfurt yesterday after four rounds of negotiations.

The contract, backdated to January, guarantees a pay increase that is fractionally higher than the anticipated rate of inflation of 3 per cent for 1984.

It is the most important crack so far in the German labour movement's over its facade of unity call for a cut from 40 to 35 hours in the basic working week.

The building workers are the first example of a major union preferring to build on the Government scheme to subsidise employers who allow workers to retire early at 55, rather than pursue the battle for a 35-hour week.

The new contract provides for further talks over an enlarged early retirement plan for the building industry. It stipulates that assuming agreement is reached, the working week in the sector will remain at 40 hours.

## Distillers to buy its U.S. importer

By RAY MAUGHAN IN LONDON

DISTILLERS COMPANY (DCL), the leading supplier of Scotch whisky, is to pay about \$250m for Somerset Importers of New York, one of DCL's biggest customers and the sole importer of its Johnnie Walker whisky and Tanqueray gin brands in the U.S.

Discussions started more than two months ago and, subject to its compliance with U.S. anti-trust laws, the deal should be completed later this month or in early May. DCL is now negotiating a syndicated dollar-denominated Euromarket loan to finance the acquisition.

Mr John Connell, chairman of DCL, said yesterday: "This very substantial investment will give us control over the destiny of the distributor of some of our most important brands and will bring Somerset's very considerable marketing skill into the group."

"These skills can be utilised not only in developing Somerset's existing products, but also new product lines."

## Madrid to buy Roland missile

Continued from Page 1

against a hypothetical low-altitude air attack from North Africa.

In recent months it had been thought that friction between Paris and Madrid, particularly over the shelling of a Spanish trawler in French fishing waters last month, might tip the balance back in favour of the British option.

The deal, which comes after a long period of Spanish reliance on U.S. arms, is the second major stage in re-equipping the Spanish forces, following the choice of a new fighter aircraft.

A decision on a new battle tank, for which France and West Germany are competing, is pending.

The Roland missile is made jointly by Aerospatiale of France and Messerschmitt-Bölkow-Blom of West Germany, and has already been sold to the U.S., Argentina, Brazil and Iraq.

## Volvo opens merger talks with Clark

Continued from Page 1

The chief advantage for Volvo in the deal would be gaining access to the U.S. market, where it has only a very small presence.

Mr Erich Johanson, president of Volvo BM, said in a recent interview that anyone who pretended to be an international competitor could not forget about the U.S., which accounted for a third of world markets.

As part of its reorganisation programme, Clark closed four plants in 1982 and reduced its workforce by 1,500 last year. In addition, in 1982 it bought White Motor Credit and entered an agreement to finance Volvo White's U.S. truck dealers at a time when Volvo was buying up some of White's other assets.

Sales of Clark Michigan after the absorption of Euclid are expected to be around \$400m a year. In 1983, Clark made net profits of \$12.4m

## Kleinwort buys U.S. bond dealer

By David Lascelles in London

KLEINWORT BENSON, the UK's largest merchant banking group, is to buy ACL Government Securities (AGS), a U.S. government bond dealer for \$27.3m in cash. The deal will make it the first full foreign owner of one of the 37 primary dealers recognised by the Federal Reserve Board, to make markets in U.S. Treasury securities.

The seller is Donaldson, Lufkin & Jenrette (DLJ), the Wall Street investment bank which bought AGS as part of a larger acquisition in 1981, but decided to sell it off because it duplicated its own government bond business. DLJ said last night that it intended to remain a Treasury bond dealer.

AGS, based in Chicago, has net assets of \$18.2m and made \$7.6m profit last year, though substantial charges back to DLJ reduced this to a net profit of \$2.2m.

Mr Martin Jacobm, Kleinwort's vice-chairman, said the deal would give the banking group "a prominent position in the most important capital market in the world. It has significant implications for our expanding worldwide securities dealing business, as well as being a highly profitable and well regarded operation in its own right."

The deal is subject to the waiting period under U.S. anti-trust law. It did not need the approval of the Federal Reserve Board, but the New York Fed will place it on its list of approved dealers under its new name, Kleinwort Benson Government Securities Inc.

AGS employs 66 people, about half of them dealers and salesmen. Kleinwort will invest a further \$1m by the end of this year to expand AGS's capital base and permit faster growth.

The decision to go for a U.S. firm contrasts with the recent series of domestic acquisitions by UK banks in the securities business. But Mr Jacobm said Kleinwort had a strategy of expanding into the U.S. market where it already has investment, corporate bond and bullion operations. He would not comment on whether Kleinwort was still interested in an acquisition in the UK.



## Company vehicle fuel cards and where they fall short.

As many businesses recognise, a card-based payment system can make an important contribution to simplifying expenses procedures and controlling the costs of running a vehicle fleet. On almost any garage forecourt, you'll see the signs for any number of such systems.

As you may have noticed though, one sign appears more frequently than any other - Dialcard.

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Dialcard is obviously a management tool you will want to know more about, particularly when you realise that fuel and garage services for an average company fleet of one hundred typical cars and light vans costs around £170,000 annually.

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Its coverage is therefore exceptional - and is not confined to a particular brand of fuel. But optimum, nationwide convenience is only one of the advantages that sets Dialcard apart.

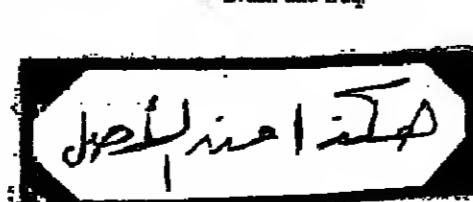
In contrast to cards which are for fuel only, the basic Dialcard system takes care of all the other items of expenditure that running a company vehicle involves - servicing, repairs, tyres, exhausts and batteries.

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The fleet cost control system that leaves nothing to chance.

## World Weather

Area	Temp	Wind	Cloud	Temp	Wind	Cloud
Amman	11	15	C 10	16	14	10
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Amman	11	15	C 10	16	14	10





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**Icahn in new bid for ACF Industries**

By Our New York Staff  
 THE BATTLE for control of ACF Industries, the U.S. shipping, railway rolling stock and energy group, heated up again yesterday after an investor group led by Mr Carl Icahn, one of Wall Street's leading arbitrageurs, bid \$33 a share, or a total of \$495.8m, for the company.

The latest bid, the second involving Mr Icahn, who owns 27.3 per cent of ACF, tops an earlier agreed bid of \$30 a share or \$420m from WACF Holding Company, a privately held company formed to acquire ACF by a group of investors led by the private investment banking firm of E. M. Warburg, Pincus and Company.

ACF confirmed yesterday that it had received a letter from Condor Investors Associates Limited Partnership, which is controlled by Mr Icahn, proposing to acquire ACF for \$33 a share subject to certain conditions.

Last month ACF entered into a definitive merger agreement with WACF Holding Company for a leveraged buyout valued at \$420m. That offer is due to be voted on by shareholders on April 25.

**Tandy plans \$355m share buyback**

By Terry Dodsworth in New York  
 TANDY Corporation, the largest U.S. electronics retailing company, is proposing to buy in around one-tenth of its equity for about \$355m.

The move follows similar programmes by other U.S. companies and reflects a general industry desire to increase earnings per share while utilising excess cash, for which no specific projects have been earmarked.

Tandy's last balance sheet, as of June 1983, showed cash and short-term investments of \$286m against only \$168m in debt. In the first six months of the present fiscal year, Tandy has earned \$190.9m, or \$1.54 a share, on sales of \$1.5bn. This compares with net income of \$146m, or \$1.41 a share, in the same period of the previous year, on sales of \$1.3bn.

At the end of 1983, Tandy had 104m shares outstanding, and under the deal announced yesterday will be offering \$35.50 each for 10m shares. It may accept an additional 5m shares, but reserves the right to withdraw the offer if less than 6m shares are tendered.

**Cross-currency loan packages cut cost of borrowing**

BY PAUL TAYLOR IN NEW YORK

IT IS 10.30am in New York, 3.30pm in London, 4.30pm in Paris and 2.30am the next day in Sydney. The telephone and telex lines to Salomon Brothers' Manhattan headquarters are buzzing, as the final touches are put to a complex \$43.5m cross-currency interest rate swap deal.

For two years now deals such as this have been gaining popularity in financial markets, prompting the employment of full-time specialists at many banks. Their objective is to help borrowers raise funds on the terms they require, and in the currency they prefer, without being constrained by the day-to-day vagaries of different markets.

The deal described involved the Council of Europe's Resettlement Fund, based in Paris, the National Australia Bank, a U.S. savings and

loan association and investors in Switzerland, the U.S. and the Pacific Basin.

By the close the Council of Europe was estimated to have saved more than \$2.5m in interest. The Australian bank had opened up a new credit source. The U.S.-based S & L had converted a floating rate liability into a fixed rate liability more closely matching its assets. Salomon Brothers, the Wall Street investment bank, had earned an "interesting and profitable" commission.

The deal exploited the advantage one borrower has in one market against that of a second borrower with a similar credit rating in a different market.

The starting point for the transaction was that the Council of Europe wanted to borrow in low-cost

markets - like the Swiss franc foreign bond. The Council, however, has been a frequent borrower in the Swiss market and concluded that it would have had to pay a premium if it had gone there directly.

By contrast, the National Australia Bank could, as a new borrower, command a good coupon rate in the Swiss market, would benefit from the market exposure, but wanted floating rate dollars.

The resulting deal was put together by Mr Neil Benedict, the English-born vice president of Salomon's International Capital Markets Services Group in the Wall Street firm's corporate finance department. It ran like this:

Stage 1: U.S. dollar private placement for the Council of Europe. Salomon Brothers arranged a \$43.5m fixed-rate private placement on un-

disclosed terms with Pacific Basin Investors.

Stage 2: public offering of Swiss francs for the National Australia Bank. Credit Suisse, as lead manager, arranged a 10-year SwFr 100m public bond issue in Switzerland at the fixed rate of 5 1/2 per cent on behalf of the bank.

Stage 3: currency and interest swap in which U.S. dollars are exchanged for Swiss francs. Salomon arranged a deal in which the Council of Europe received U.S. dollars, each side taking on the other's interest rate commitments.

Stage 4: interest rate swap in which the dollar fixed interest rate commitment is swapped for a floating rate commitment. Salomon arranged a deal between the National Australia bank, in which the bank wound up with a floating rate liability

ty tied to the London interbank offered rate (Libor), while the S & L ended up with a fixed-rate liability.

In practice, the final stages took place simultaneously, with Mr Benedict, Mr Roger Vanden Branden, Governor of the Council of Europe, and a senior executive of the Australian bank, all sitting in London, and Mr Michael Portington of Salomon sitting in New York talking to Salomon's Sydney and London offices and to the unnamed S & L.

At the close, the liabilities for each of the participants remain in the initial currency but are fully hedged forward since both the principal and the interest payments are made by the assuming partner in the transaction.

While this particular sequence of transactions is one of a very few

which the participants have been willing to make public, deals like it have become the bread and butter of a large segment of the international capital market.

Mr Benedict says Salomon itself has arranged about 10 similar transactions in the last six months using the Swiss franc market alone. Other recent deals have involved such U.S. corporations as Hospital Corporation of America, linking with an Austrian government agency.

The cross-currency interest rate swap began to make itself felt with an IBM and World Bank deal in 1980, in which the U.S. computer giant was concerned to lock itself into a currency gain.

Nevertheless, Mr Benedict says the Council of Europe deal represents a "classic example of real ben-

efits to be derived by issuers and investors through the innovative use of integrated world financial markets."

For the moment many such deals revolve around the Swiss franc market because of its particular investor selectivity and low nominal interest levels, although Mr Benedict accepts that this could change as investor perspectives shift.

The potential for such deals - where everyone apparently gains - is highlighted by the fact that last month Salomon conducted a study on behalf of one U.S. corporation and discovered six potential markets where borrowing would have been cheaper than in the currently depressed U.S. credit market.

International capital markets, Page 36

**Massey-Ferguson cuts loss sharply**

BY BERNARD SIMON IN TORONTO

MASSEY-FERGUSON, the troubled Canadian manufacturer of farm and industrial machinery and diesel engines, reduced its net loss to \$68m in the year to January 31 from \$412.2m in the 12 months to October 31 1982, despite the continued weakness of its main markets.

The net loss per common share was cut from \$0.95 to 93 cents. Massey reports in U.S. dollars.

Sales dropped by a quarter last year to \$1.5bn, although 1982 figures included sales of Latin American subsidiaries which have since been deconsolidated. Excluding these operations, revenues fell by 15 per cent last year with the largest decline suffered by operations in Africa, Asia and Australasia. Diesel engine sales slumped by 30 per cent in 1983.

The company said it was able to cut its net losses by reducing costs and restructuring its operations. Interest charges were halved last year to \$88.7m, while marketing and administrative costs declined to 14.2 per cent of sales from 16.9 per cent in the 1982 financial year. Cash flow from operations was positive for the third successive year.

Mr Victor Rice, Massey-Ferguson's chairman, said he expected a "further improvement" in results this year. "We are still biting the bullet, still cutting costs and still demanding more results from our assets," he said. Sales in the three months to January 31 rose to \$362m, 16 per cent higher than the same quarter last year. The net quarterly loss was reduced to \$26.9m from \$84.4m.

**New deadline for Dome**

BY OUR TORONTO CORRESPONDENT

FIVE JAPANESE utilities have given Dome Petroleum, the Canadian energy conglomerate, a nine-month extension for conclusion of a sales contract for liquefied natural gas (LNG) from Dome's proposed \$1.8bn (\$1.4bn) gas project in British Columbia.

Dome asked for a 12-month extension, but the Japanese have agreed to move the deadline, already adjusted three times, only to October 31. Deliveries from the project are scheduled to start in 1986, but work has been delayed by Dome's continuing financial problems and difficulties in obtaining of-

ficial permission for LNG exports. Dome has an 80 per cent stake in the venture and its partners include the Japanese group Nishio-Iwai.

The extension granted by the Japanese utilities is understood to carry several conditions, including completion of negotiations for Canadian export permits, the restructuring of Dome's \$2.8bn debt, agreement to finance and build gas pipelines from the project and for bringing new partners into the venture. Dome would like to reduce its interest to around 30 per cent as part of its efforts to strengthen its financial position by disposing of assets.

**Nutricia profits up 21%**

By Walter Ellis in Amsterdam

NUTRICIA, the Dutch-based foodstuffs group which has subsidiaries throughout Western Europe, lifted its 1983 earnings by 21 per cent, to just over Fl 22m (\$7.5m).

Sales were up by 5 per cent, to Fl 570m, with most of the increase coming in the second half. The profit on ordinary activities (operating profit plus net financial income and expenses) shows an increase for the year of 25 per cent. Tax went up, however, from 39.7 per cent of gross earnings to 42.3 per cent.

Nutricia has proposed a 1983 dividend of Fl 3.80, against Fl 3.40 for 1982. Because of a slight increase in share capital last year, earnings per share rose by 18 per cent, and not the 21 per cent applying to the overall result.

KNP, the Dutch paper manufacturer, has expressed "considerable optimism" about its prospects for 1984.

Net profits last year were Fl 36.4m (\$12.5m), representing an improvement over 1982 of no less than 325 per cent. The directors plan a dividend for the year of Fl 3.50, up Fl 2 on 1982.

Operating profit in the first half of this year is expected to be well up on the Fl 6.8m achieved from January to June last year, and KNP is forecasting a six-month result in excess of Fl 15m.

Last year's total operating profit of Fl 54.6m was boosted by extraordinary gains of nearly Fl 12m from restructuring operations. At the same time, share capital was up, in part because of the early repayment of a subordinated bond, from Fl 292m to Fl 351m.

Earlier this year Mr F. J. de Wit, chairman of KNP, said a strong pick-up in demand for paper in the U.S. had begun to offset the glut of paper available in Europe.

**Snamprogetti nearly doubles earnings**

BY JAMES BUXTON IN ROME

SNAMPROGETTI, the engineering and contracting subsidiary of ENI, the Italian state energy corporation, almost doubled its profits for 1983. Net profits were L15bn (\$9.3m) on sales of L743bn compared with profits of L8.5bn and sales of L732bn in 1982.

The company ended 1983 with an order book worth L1,600bn after a year in which it won a series of major contracts, including one for a gas pipeline in Nigeria, a refinery expansion project in the same country, a crude oil treatment plant and 1,500 km of pipeline in Sudan, and a project to boost the capacity of the Netherlands-Italy gas pipeline.

Saipem, Snamprogetti's sister company which concentrates on drilling and pipelaying, confirmed earlier forecasts by reporting a L51.7bn net profit on the 1983 consolidated activities of the whole group, including its minority participation. Total turnover for the

group was L1,422bn, and the company's order book stood at L4,491bn at the end of 1983, a 32 per cent increase on 1982. The sales of the parent company, Saipem SpA amounted to L1,066bn, with a net profit of L35.8bn after allocating L133bn to depreciation.

Saipem is to increase its capital from L120bn to L150bn and float the new shares on the Milan stock exchange, where Saipem has applied for a quotation. The operation is expected to bring in about L120bn.

CMC, the Ravenna based co-operative which is one of Italy's major construction companies, last year made a profit of 2 per cent on sales of L268bn, of which L117bn was related to work carried out in Italy. The company forecast sales of L220bn and a profit of 2.4 per cent for 1984. Capital is being doubled from L2,694bn to L5,230bn.

**Norwegian insurer advances**

By Fay Gjester in Oslo

STOREBRAND-NORDEN, Norway's largest insurance group, doubled pre-tax profits last year - to Nkr 216m (\$26.6m) from Nkr 106m in 1982 - and is increasing its dividend by Nkr 1 to Nkr 13. Earnings per share rose by 50 per cent from Nkr 27 to Nkr 39.

The 1983 annual report says profits from activities in Norway continued to grow last year, but foreign business still showed a loss.

Gross premium income in the non-life sector was 12 per cent up, at Nkr 5.25bn. The life insurance company in the group, Storebrand-Norden Liv, reports a 19 per cent rise in premium income to Nkr 915m.

The board is seeking approval for a one-for-five rights issue at 175 per cent of par, which would boost share capital by Nkr 104m to Nkr 620m.

**Treca bids for Dunlop subsidiary**

By Paul Betts in Paris

A FRENCH manufacturer of bedding equipment and car seats has put in a last minute bid to takeover the Dunlopillo mattress and car seat operations of Dunlop France.

The French company, Treca, which is privately held, confirmed that it had made an offer yesterday as the deadline over the future of Dunlop's French operations was closing in. The French Government has been seeking counter-offers from French and European concerns for Dunlop's French activities as an alternative to a fresh takeover bid for these operations from Sumitomo Rubber of Japan.

The bedding group said it was interested in the Dunlopillo facility at Mantes near Paris. But it also said it clearly could not consider nor was interested in Dunlop's French tyre manufacturing operations.

**Akzo nv registered office at Arnhem**

The annual general meeting of stockholders will be held on Tuesday, April 24, 1984, at 10.30 a.m. in Musis Sacrum, Velperplein, Arnhem.

Facilities for simultaneous translation into English are available.

- Agenda
- 1 Opening
  - 2 Report of the Board of Management for the fiscal year 1983
  - 3 Approval of the financial statements; consideration of the dividend proposal
  - 4 Determination of the number of members of the Supervisory Council; appointment of members of the Supervisory Council
  - 5 Proposal to designate the Board of Management as entitled to issue shares and to restrict or disregard the preemptive rights of stockholders
  - 6 Proposal to authorize the Board of Management to acquire shares in the Company on behalf of the Company
  - 7 Any other business.

Re item 4: In connection with the nomination for appointment to the Council of F.H. Fentener van Vlissingen, it is proposed that the number of members of the Supervisory Council be raised to 12. It is further proposed that S.C. Bakkenist, J.R.M. van den Bink, Y. Scholten, and E.G.G. Werner be reappointed.

Re item 5: This proposal concerns the designation of the Board of Management, for a period of 5 years, as entitled: (a) to issue, and to grant rights to take up, the ordinary shares not yet issued; (b) to restrict or disregard the preemptive rights which the law accords to stockholders upon the issue or the granting of rights by virtue of (a) provided that such act of restriction or disregard does not relate to more than five million ordinary shares, and only insofar as shares are concerned which are issued pursuant to a resolution of the Board of Management.

Re item 6: This proposal concerns the authorization of the Board of Management, for a period of 18 months, within the limits provided by the law and the articles of association, to acquire for a consideration shares in the company at a price not in excess of market value.

The agenda, the signed financial statements, as well as a list of personal data

on the nominees for the Supervisory Council are available for inspection by stockholders at the Company's office, Velperweg 78, Arnhem.

There and through the undermentioned banks stockholders may obtain free copies of the forecast documents as well as a free copy of the annual report.

Stockholders who wish to attend the meeting should deposit their shares in order to establish their identity not later than Wednesday, 18 April, 1984 at the Company's office, Arnhem, Velperweg 78, or with one of the following banks:

- In the Netherlands with Algemene Bank Nederland N.V., Amsterdam; Rotterdam Bank N.V., Bank Mees & Hope NV, Nederlandse Credietbank N.V., Nederlandsche Midlandbank N.V. and Pierson, Holding & Pierson N.V. in Amsterdam, Rotterdam, The Hague and Arnhem, insofar as said banks have branches in these cities, and with Rabobank Nederland at Utrecht;
- In the Federal Republic of Germany and in West-Berlin with the Deutsche Bank AG, Deutsche Bank Berlin AG, Bank für Handel und Industrie AG, Berliner Handels- und Frankfurter Bank, Dresdner Bank AG and Sal. Oppenheim jr. & Cie. in Frankfurt a.M., West-Berlin, Düsseldorf, Cologne, Hamburg and Wuppertal;
- In Belgium with Generale Bank-maatschappij N.V., Bank van Parijs en de Nederlanden België N.V. and Kredietbank N.V. in Brussels and Antwerp;
- In Luxembourg with Banque Générale du Luxembourg S.A. in Luxembourg;
- In the United Kingdom with Barclays Bank PLC and Midland Bank PLC in London;
- In France with Lazard Frères & Cie. and Banque Nationale de Paris in Paris;
- In Austria with Creditanstalt-Bankverein in Vienna;
- In Switzerland with Swiss Credit Bank, Swiss Bank Corporation, Union Bank of Switzerland in Zurich and Basel and their branches, and also with Pictet & Cie. in Geneva;
- In the United States of America with The Chase Manhattan Bank N.A. in New York N.Y.

The Supervisory Council  
 Arnhem, 2 April, 1984



**Financial debut in Portugal**

By Diana Smith in Lisbon

COMPANHIA de Investimentos e Servicos Financiaras (CISF), Portugal's first fee-based financial company, is being launched this week.

The event marks the Portuguese debut of Japan's Sumitomo Bank, which holds 10 per cent of CISF and an expansion of activities in the country by Britain's Lloyds Bank International, also with 10 per cent.

CISF plans to deal in the increasingly diversified bonds that many Portuguese public companies are using to raise capital, and it hopes to spur on the somewhat dormant domestic stock market by persuading private companies to go public.

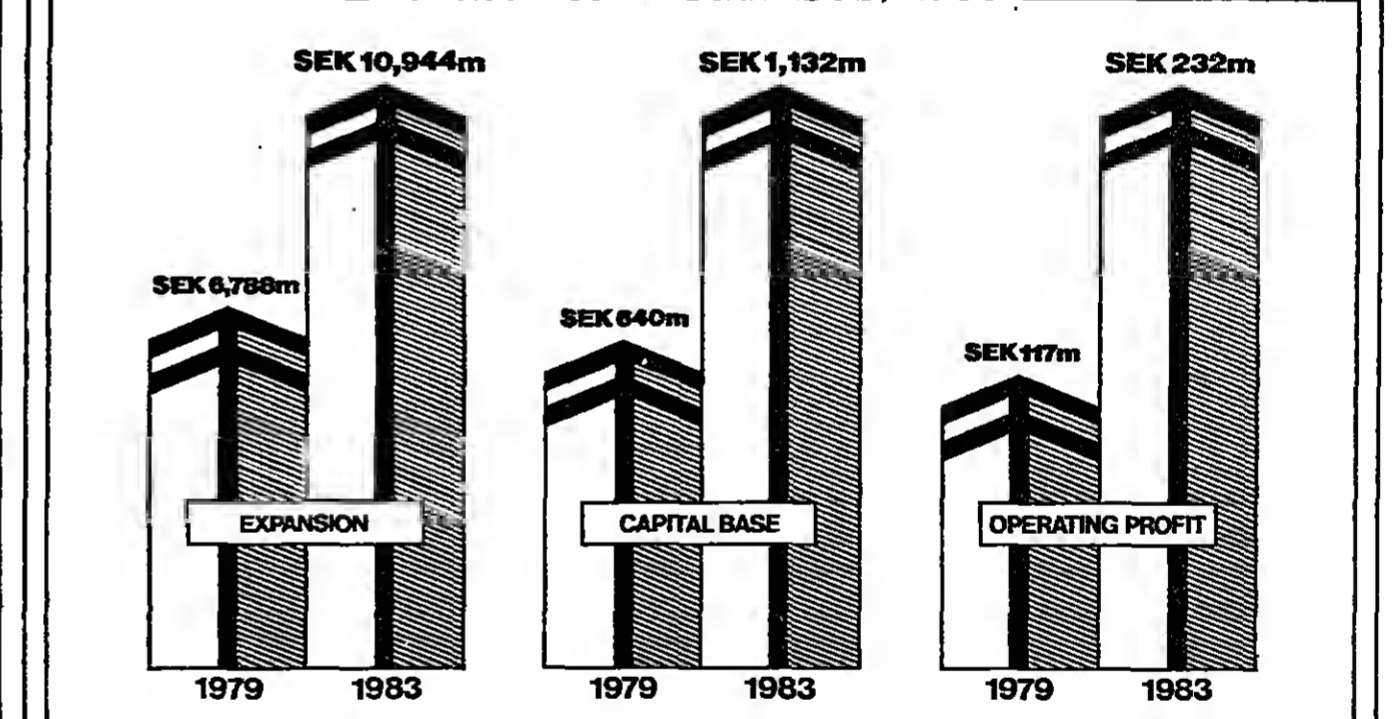
Two of CISF's founders, Sr Tavares Moreira and Sr Vaz Mascarenhas, both former officers of the National Savings Bank, hope to nudge the authorities into developing liberalised foreign exchange and money markets to replace the present tightly controlled systems.

CISF numbers two nationalised Portuguese banks - Banco Nacional Ultramarino and Banco Fonecas e Burnay, each with 10 per cent - and three insurance companies among its shareholders. A further 12 companies, including construction and retail groups, together hold 29.5 per cent and individual shareholders hold 19 per cent.

The company had trouble getting permission to operate because its aims fell outside the limited range of investment and leasing companies allowed to operate since 1980 in a sector dominated by nationalised banks.

It finally skirted the problem by adding "investment" to its title and medium-term lending to its activities, thus qualifying as an investment company.

**Sundsvalls Banken 1979/1983**



**Five years' steady expansion at home and overseas**

In the years 1979/1983 Sundsvalls Banken has seen its capital base grow from SEK 640m to SEK 1,132m.

This growth expansion has been achieved entirely through retained profits which have grown continuously during the same period. The resultant strong capital base has enabled a substantial increase in total assets and a broadening of the Bank's range of activities notably in the International Division, based in Stockholm.

The bank has also expanded internationally through its participation in the well established London merchant bank, Arbutnot Latham Bank, and the setting up of a representative office in Trondheim, Norway.

To secure a further rapid expansion, within the traditional context of a soundly based well consolidated capital structure, the Bank is making a rights issue which will add approximately SEK 130m of additional equity and reserves. Sundsvalls Banken, International Division, Reperingsgatan 42, Stockholm. Tel: 08-22 77 20 Telex: 17616 SUB S

Sundsvalls Banken, International Division, P.O. Box 7133, S-103 87 Stockholm, Sweden.

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April 3, 1984, London  
By: Citibank, N.A. (CSSI Dept), Agent Bank **CITIBANK**

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Hong Kong May 3 & 4 1984

Robert Guy, Chris Stals, Hans Mast, Meinhard Carstensen and Takashi Tanaka will be among the most prominent international authorities addressing this sixth international meeting. The occasion is one of the main FT forums of the year and the worldwide audience is invariably impressive.

Further details and registration forms from:

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## INTL. COMPANIES & FINANCE

### Mixed results for foreign oil companies in Japan

TOKYO—Six Shell companies in Japan have posted a 58.9 per cent gain in aggregate net profits to ¥22,58bn (\$100m) for 1983.

The companies included are Shell Kosan, Shell Sekiyo, Shell Kagaku, Shell Sempaku, Kabushiki Kaisha Rising Sun, and Billiton Metals Japan. Shell also owns 50 per cent of refiner Showa Oil, of which figures are not consolidated.

Profits before tax and extraordinary items swung to a gain of ¥24.2bn from a loss of ¥8.4bn in 1982, but sales proceeds fell by 13.6 per cent to ¥1,248bn. Sales volume for oil declined by 6.6 per cent to 16,299m kilolitres.

The decrease in sales proceeds came from fierce competition as a slide in market prices which exceeded crude oil price

cuts. Despite the lower proceeds, the companies reduced the cost of oil sold helped by favourable exchange rates.

Esso Sekiyo and Mobil Sekiyo have also posted gains in unconsolidated net earnings for 1983 despite declines in sales.

Esso Sekiyo, which is wholly owned by Esso Eastern, a unit of Exxon of the U.S., posted net earnings of ¥14,62bn, up 0.4 per cent from ¥14,56bn in 1982.

However, profits before tax and extraordinary items, fell 4.1 per cent to ¥25,72bn, and sales revenues dropped by 12.5 per cent to ¥950bn.

The dividend total is raised to ¥7,309 a share from ¥7,250 a year earlier.

Mobil Sekiyo, which is wholly owned by Mobil Petroleum of the U.S., posted a net profit of

¥20,07bn, up 116.8 per cent. Pre-tax profits were ¥18,39bn, up 3.3 per cent, but sales fell by 10.1 per cent to ¥1,042bn.

The dividend total is lifted to ¥13,609 a share from ¥10,000 in 1982.

Esso Sekiyo's sales fell mainly because of a decrease in sales volume of oil products and declines in prices of crude oil and oil products. Sales volume fell 3.0 per cent to 11,504m kilolitres from 11,864m kilolitres a year earlier.

The company's net profit showed a slight gain, despite the decline in sales, because of reduced corporate taxes.

Mobil Sekiyo's sharp rise in its net surplus came from extraordinary profits of ¥8,004bn. Total sales volume of oil products edged down by 1 per cent to 13,498m kilolitres.

AP-DJ

### Downturn in profits at Intraco

By Chris Sherwell in Singapore

INTRACO, the publicly-quoted trading company in which the Singapore Government has a substantial minority stake, has reported pre-tax profits of S\$7.06m (US\$5.4m), down 37.4 per cent for the year to December, despite a 5.2 per cent rise in turnover to S\$462m.

The company warns that its 1984 performance is likely to be similar. Although second-half profits last year were better than those of the first, the company says that first quarter trading conditions this year remained sluggish.

Net profits attributable to shareholders were S\$4.7m, down 32.8 per cent despite the sale of investments. The directors have recommended an annual dividend of 10 cents a share, the same as last year, representing a payout of S\$4.5m which is higher than last year because the company's share capital has been increased from S\$40m to S\$75m.

### Australia to restructure bank

CANBERRA—Australia's government-owned Commonwealth Banking group is to be restructured, Mr Paul Keating, the Federal Treasurer, said yesterday.

The Government plans to make the Commonwealth Savings Bank a wholly-owned subsidiary of the Commonwealth Trading Bank and to rename the trading bank the Commonwealth Bank of Australia.

In addition the capital position of the new bank will be bolstered by transferring A\$75m in Commonwealth Development Bank reserves to the restructured bank.

Mr Keating said the Government also plans to reduce to 45

per cent from 50 per cent the share of profits the Commonwealth Bank must pay in dividends to the Government and make the Commonwealth Development Bank subject to company income tax.

The moves are designed to modernise the structure of the bank and make it more competitive with Australia's commercial banks.

The trading bank, with assets estimated at A\$10.5bn is the fourth largest bank in Australia. In the year ended June 30, 1983, the Commonwealth Banking Corporation had a profit of A\$152.8m with A\$47.5m coming from the trading bank and A\$88.2m from the savings bank.

● The Victorian Supreme Court has ruled that all share transactions in Monarch Petroleum NL and other Magnet group companies made after 11:01 AEST on March 14 are void.

This was the time that a forged letter was issued to Australian stock exchanges claiming that Monarch had regained part of a former stake in the major Jabiru oil field in the Timor Sea in an out-of-court settlement of a legal action.

Monarch shares doubled to 40 cents in a hectic half-hour's trading before the forgery was detected and Magnet group share trading was suspended. Agencies

### Revival plan for Thai United Trust

BANGKOK—Laem Thong Bank has agreed to join the state-owned Krung Thai Bank and two other Thai companies in a plan to revive Thai United Trust, which was forced to suspend its operations last year.

Laem Thong Bank said the Bank of Thailand has approved its rescue plan, which calls for an increase of Thai United Trust's registered capital to 250m baht (U.S.\$10.9m) from 100m baht.

Thai United Trust was hit by a run on its deposits last year after the collapse of several other finance companies.

Krung Thai will provide 50m baht of the additional capital and Laem Thong and the two other companies, Thai Life Insurance and Bura Windsor, will provide the rest.

The four companies have agreed to assume all of Thai United's debts totalling 1.16m baht, mostly in the form of notes owed to individual depositors. The debts will be repaid with a 6 per cent interest stretching up to five years for depositors of amounts over 1m baht. Reuter

### Name change for Mercedes unit

BY OUR JOHANNESBURG CORRESPONDENT

MERCEDES BENZ the West German car manufacturer has announced that the name of its 50.1 per cent owned South African subsidiary is to be changed from United Car and Diesel Distributors (UCDD) to Mercedes Benz of South Africa.

The name change follows the increase earlier this year in Mercedes' interest in the company after the previously largest shareholder, Volkskas, the banking group, declined to follow in full a R30m rights

issue. Volkskas now has 26.5 per cent of the subsidiary's equity, and the Ernst Gohner Foundation of Switzerland 23.4 per cent.

The company sold cars, trucks and buses worth R869m (\$561m) last year and is second only to Toyota in the South African motor market. In terms of vehicles sold Mercedes had 6.9 per cent of the total South African vehicle market but its share of sales revenue was 13.8

per cent. By way of comparison Toyota sold 92,386 vehicles worth R951m. It had 19 per cent of the market by value and 22.8 per cent by volume.

The South African operation is the largest Mercedes division outside Germany and represents a total investment of R240m. The company expects to spend a further R140m over the next five years in South Africa largely on expanding its dealer network. The company's factory at East London employs 4,500.

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BIDS AND DEALS

**Bristol Oil sells BW Mud to management**

Bristol Oil & Minerals, the former KCA International Group headed by Mr Paul Bristol, has signed a conditional contract to sell its BW Mud subsidiary to that company's management for £4.16m—£3.56m above book value.

This sale is in line with Bristol's strategy of disposing of businesses which are peripheral or unrelated to its main activity of oil, gas and minerals exploration and production, the company said.

Shareholders will be asked to approve the transaction at an extraordinary meeting on April 26.

Mr Ian Hunter, an executive director of Mud, and two colleagues, Mr Roy Daynes and Mr John Walls have, with institutional backing, formed a new company, Orite, to buy the UK Mud business of BW Mud. Orite will take over the creditors and bank overdraft of Mud.

The Bristol circular to shareholders revealed the company paid £29,500 to Mr R. A. D. Broadhead, a former director, and £25,000 to Mr M. E. Campbell, another former director, for loss of office.

**W. G. Allen**

W. G. Allen and Sons (Tipton) has purchased Burgess and Co (Engineers) and E and E Boliers from Richardson Wetzgarts for £164,000 in cash. In addition Allen will be providing £850,000 of loan capital to Burgess to enable it to pay a special dividend of £627,749 to Richardson. The purchase represents a significant strengthening of Allen's boiler interests.

**Fitch acquires Booker offshoot**

BY RAY MAUGHAN

TWO FOOD groups, each cash-rich after recent major disposals, announced their respective programmes of restructuring yesterday when Fitch Lovell acquired Parris & Fenn, a speciality food distribution company, from Booker McConnell for £3m.

Parris & Fenn produced taxable profits before central management charges of £588,000 just over £11m. Net worth at end-December was £750,000. Booker has sold its Fletcher Sutcliffe Wild mining equipment subsidiary and its spirits and liqueur interests over the last year while strengthening its food retailing activities through a £13m takeover of Bishops

Group. Fitch on the other hand, has sold Keymarkets, its principal food retailing subsidiary, to Dee Corporation, formerly Linford Holdings, and added to its meat manufacturing and speciality food distribution businesses by acquiring W. A. Turner and PE Foods. Parris & Fenn, founded some 15 years ago, is described as a "natural fit" for Fitch and distributes Jacksons of Piccadilly teas, the Barilla range of pasta and Escottier sauces.

Fitch, meanwhile remains on the acquisition trail although the chairman, Mr Geoffrey Hankins, warned yesterday that "we will not pay fancy prices."

**SHARE STAKES**

**C. and W. Walker**—General Investors and Trustees has disposed of its holding of 221,251 ordinary shares, which constituted 5.51 per cent of the issued share capital. River and Mercantile Trust sold 100,000 ordinary shares, the holding being to 125,000 shares (3.11 per cent).

**BICC**—Lord Pennock, following exercise of share options, sold 39,018 ordinary shares.

**Alva Investment Trust**—Temple Bar Investment Trust has increased, in the market, its holding of 328,400 shares to 420,500 shares (29.74 per cent of the issued ordinary share capital).

**London Trust** has disposed of its total holding of 382,500 ordinary shares (19 per cent).

**George Dew**—Scottish Ameri-

can Investment Company's interest in the issued ordinary share capital is now 885,000 shares (11.06 per cent); previously 800,000 shares (10 per cent).

**Bronx Engineering**—Cassoo has disposed of 300,000 ordinary shares and now has 500,000 shares (6.4 per cent).

**Jove Investment Trust**—Seligmann Rayner and Co is interested in 1,830,000 shares, including 480,000 shares over which they have discretionary control on behalf of clients. The individual partners of Seligmann and their families are interested in the following shares (including the 1,830,000 shares referred to above): Mr R. R. Harris 1,968,000; Mr F. Harr 1,890,000; Mr R. H. Curtis 1,530,000 and Jason 1,830,000.

**Powell in quarry deal with Amey Roadstone**

Powell Duffryn, the diversified industrial group, has agreed to merge its quarrying and concrete brick-making operations with some of Amey Roadstone's similar interests in Wales.

Announcing the deal yesterday, Powell said it expects to receive £10m cash through the release of working capital and an unspecified cash payment from Amey. A Consolidated Gold Fields subsidiary.

Both companies stressed the complementary nature of the quarries and plants to be included in the new joint company, to be called ARC-Powell Duffryn, which they will own equally.

A Powell spokesman said the venture was the best way for it to take over the highly competitive quarrying business. He said that the agreement had nothing to do with Hanson Trust's purchase, disclosed in January, of a 4.58 per cent stake in Powell. Hanson recently won a bitterly contested battle to acquire London Brick.

Powell said its share of the profits from the new company was expected to be close to its current profits and the operations to be merged. Mr Hugh Parry, an Amey director who until recently was finance director, said both sides of the deal were currently in the black.

The new company, to be managed by Amey and based in Aberdare, will have annual turnover of about £40m and will employ about 750 people. Mr Parry said there were no plans to close any of the operations to be merged, but that there could be a few redundancies among administrative staff because of the concentration of management at Aberdare.

**Municipal Props.**

Attributable profits at Municipal Properties rose from £142,456 to £158,248 for 1983. The net single dividend has been lifted from 9.07p to 9.98p. Tax amounted to £151,235 (£161,200) and earnings per 50p share increased from 29.44p to 38.48p.

Turnover, comprising rents receivable, came to £418,965 compared with £381,500.

Current value of properties held is £7.9m, cost £3.09m (£7.09m, cost £2.74m).

Profits were struck after surplus of £139,725 (£88,825) before tax, and were approved by the dealing subsidiary. Surplus on sales of property and investments by the holding company amounted to £34,735 (£31,365) net of tax, credited to reserves.

**Collier offer**

Applications were received for 3,650 "A" shares in Collier Holdings. All were received at a minimum of 1,000 shares and those applications in excess of 2,400 shares have been reduced by about 59 per cent.

Employees and their immediate families were offered 2.05m shares at 10.2p each. Mr David Simons, the finance director, says the management is "absolutely delighted" with the response to the buyout plans. Some 27.5 per cent of the shares will now be held by the directors and employees.

**Racal-Milgo**

Florida based Racal-Milgo finished the year to March 31 1984 with record revenues, exceeding \$240m, and aims to break that \$300m barrier in the next 12 month period.

With these results, the U.S. division will represent more than half of the \$495m annual revenues of Racal's worldwide data communications group, which also includes companies in California and the UK.

**Kakuzi**

Following discussions with the Kenya Central Bank, Kakuzi, coffee and tea grower and cattle rancher, must seek approval before declaring dividends and despatching warrants to overseas shareholders. Permission was not required previously.

**Sangers Photographic**

As part of the continued movement towards strengthening distribution operations, Sangers Photographic is centralising all warehouse facilities within its Birmingham computer controlled complex.

**Tomatin Distillers**

Unless there is a significant upturn in new whisky sales Mr A. P. De Boer, chairman of Tomatin Distillers, tells members in his annual statement that the company will incur losses in 1984.

He explains that the upturn in sales, which were anticipated for 1984, could be further delayed until 1985.

Current orders are similar compared with the same period last year and the chairman expects additional orders to be received during the rest of the year.

He adds that it is difficult to quantify these, but the directors believe that total production this year will not be less than 1983.

The export department has made a good start, and sales are expected to be higher. As known the group incurred pre-tax losses of £1.45m (£776,000) for 1983. Turnover fell from £9.8m to £9.27m.

**H. Samuel owns 41% of J. Walker**

BY CHARLES BATCHELOR

H. Samuel, the High Street Jewellery chain which is making an agreed £29m bid for James Walker Goldsmith and Silver-smith, has bought the 14 per cent stake previously held by Cecil Gee, the men's retailer, to take its own holding to 40.9 per cent.

This deal, which gives Cecil Gee a profit of nearly £800,000 before expenses, prevents the Gee holding of 1.25m shares being used as the base for a counter bid for James Walker.

Cecil Gee has been granted an option to buy 15 of the H. Samuel/James Walker shops provided the takeover goes through, for an expected £8.5m as part of the transaction.

Cecil Gee's shares rose 5p to 145p yesterday while Walker was unchanged at 158p. B. Samuel was also unchanged at 182p.

H. Samuel and its advisers, N. M. Rothschild, bought the Gee holding of Walker shares at 158p each—a total of £2.05m. The shares were bought by Gee in December and January for about

£1.15b. H. Samuel now owns 1.1m Walker shares or 12.3 per cent and has received acceptances, including the Gee holding, from the owners of 2.58m shares or 28.6 per cent.

It also owns 425,490 non-voting shares of Walker and has acceptances from the holders of \$14,527 shares, equivalent together to 10.9 per cent of the non-voting equity.

Gee has paid £60,000 for the option to acquire the 15 stores at an external open market valuation. Eleven of the stores

are from the Walker chain, the remaining two from H. Samuel. The shops are largely surplus to the needs of the combined H. Samuel/Walker group, bearing in mind other outlets in the same locations.

Subject to shareholders approving the granting of the option to Gee to buy the stores H. Samuel will make an additional payment of 1p per Walker share, increasing the value of its offers to 159p per Walker ordinary share and 132p per non-voting share.

At Commercial Union, Mr Spratt described the movement in the share price as "a fanciful story. There is no truth in it. We do not own any stock in Commercial Union. We do not have any stock. We do not have any plans to buy all or any part of Commercial Union."

**U.S. deal speculation lifts CU price again**

BY JOHN MOORE, CITY CORRESPONDENT

THE share price of Commercial Union, one of Britain's biggest insurance groups, rose 5p to 231p amid continuing speculation in the London stock market about the board's future plans for the Group.

Since last Thursday the share price has climbed from 188p and the present price values the company on the stock market at 192.24m.

The latest speculation in yesterday's trading on the London stock market centred on reported suggestions that the Group was close to finalising a deal for the sale of its U.S. operations.

The suggested deal was said to involve American International Group, the U.S. insurance company, and Aetna Life & Casualty, one of the leading U.S. insurance groups, who it was reported were planning to form a joint company to take over the Commercial Union's U.S. operations.

Mr George Spratt, the company secretary to the Commercial Union, said yesterday that the reported deal is "absolute news to us. It is complete fiction. We monitor the shares all the time and there has been very little change in the top fifty of our shareholders. I am not expecting that the shares are

widely spread as the same blocks of shares have been bought or sold two or three times over."

In Herford, Connecticut, at the headquarters of Aetna Life and Casualty, Mr John M. Galvin, senior vice president of the group's international and diversified business division, said that if such a deal was planned "nobody has told us. I know of no such activity. I think I can speak for the company."

He added: "Frankly we have not even looked at Commercial Union or its commercial equivalent."

At American International Group, Mr Edward Matthews, a

senior executive, said that the reported deal was "a fanciful story. There is no truth in it. We do not own any stock in Commercial Union. We do not have any stock. We do not have any plans to buy all or any part of Commercial Union."

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He added: "Frankly we have not even looked at Commercial Union or its commercial equivalent."

At American International Group, Mr Edward Matthews, a

**BIDS AND DEALS IN BRIEF**

Barrow Hepburn Group has acquired DB Industries Incorporated, an industrial safety product manufacturer based in Red Wing, Minnesota, U.S.

The consideration was U.S.\$800,000 cash on completion with a deferred amount payable up to a maximum of a further \$150,000 dependent on profits generated in the 18 months to December 31, 1984 and the 12 months to year end 1985. DB's turnover for the year ended June 30, 1983 was \$1.6m and pre-tax profits amounted to \$108,000.

Manor will be receiving £86,000 for the purchase (including repayment of an inter-company debt) less an amount equal to the losses of Hadfields for the three months to the end of March 1984.

Wendover is owned by Mr B. C. Dalghish, a director of Manor, and Mr W. H. Moore, a director of Hadfields. Since the disposal is to persons connected with Manor, the contract is conditional on shareholders' approval. If the contract is approved Mr Dalghish will resign as a director of Manor and of all other group companies.

Injected £710,000 by way of ordinary shares, loan stock and convertible preference shares for a 51 per cent stake in major luxury coach operator Len Wright Travel.

Len Wright has an annual turnover in excess of £21m and has expanded steadily from its formation in 1975 with one coach, to a present fleet of 32 luxury vehicles costing up to £100,000 each.

Three City institutions will share the £710,000 investment—Equity Capital for Industry, ICF and the Merchant Navy Officers' Pension Fund.

showed total net liabilities of £72,955. Trading profit for 1983-1984 is anticipated to be £140,000. The share issue represents some 0.14 per cent of the SD capital. The vendors have the option to retain or sell the shares.


SD already accounts for some 50 per cent of the sales of Alpha products and the acquisition will allow that company to be expanded on a properly capitalised basis.

The offer document from Habit Precision contains a unanimous recommendation of the Crosby Woodfield directors to accept.

The directors of Crosby note that the value of the bid is in excess of the estimated net asset value of their company as at September 30, referring shareholders to an appendix of asset values including a reduction of £580,000 in the value of certain properties following a revaluation. As at March 31 1983 Alpha

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**NOTICE OF REDEMPTION**  
To the Holders of

**GULF OIL FINANCE N.V.**

**14 3/4% Three-Year Extendible Guaranteed Notes**  
Due April 1, 1994

NOTICE IS HEREBY GIVEN to the holders of the outstanding 14 3/4% Three-Year Extendible Guaranteed Notes Due April 1, 1994 of Gulf Oil Finance N.V. (the "Notes") and the unamortised coupons appertaining thereto that, pursuant to the provisions of the Fiscal Agency Agreement dated as of April 2, 1982, among Gulf Oil Finance N.V., Gulf Oil Corporation and Morgan Guaranty Trust Company of New York and of Paragraph 6 of the Notes, on and after May 15, 1984 all of the outstanding Notes, at a Gulf Oil Finance N.V. election to redeem on May 15, 1984 the principal amount thereof plus accrued interest to said redemption price equal to 106 3/4% of the principal amount.

Payment will be made on May 15, 1984 upon presentation and surrender of the Notes, together with all unamortised coupons appertaining thereto, at the main offices of any of the following: Morgan Guaranty Trust Company of New York, New York, Brussels, Frankfurt following: Morgan Guaranty Trust Company of Luxembourg S.A. in Luxembourg; am Main, London and Paris; Banque Internationale a Luxembourg S.A. in Amsterdam; and Morgan Bank Nederland N.V. (formerly Bank Morgan Lalouche N.V.) in Amsterdam; and Union Bank of Switzerland in Zurich.

On and after May 15, 1984, the Notes will no longer be outstanding and interest thereon shall cease to accrue.

**GULF OIL FINANCE N.V.**  
By: Morgan Guaranty Trust Company  
of New York, as Fiscal Agent

Dated: March 29, 1984

 **Schroders**

**The Earl of Airlie,**  
Chairman of Schroders plc, reports on 1983

Disclosed profits of the Group after tax rose to £20,823,000 in 1983 from £15,385,000 in 1982. After deducting an exceptional item of £6,500,000 in 1983, referred to below, and non-recurring items of £2,933,000 in 1982, the increase was 16 per cent. The Directors are recommending the payment of a final dividend of 13.5p per share which, together with the payment made last October, makes a total of 19.5p per share, an increase of 10 per cent over 1982.

We have consistently adopted the conservative policy of providing for deferred taxation in the United Kingdom leasing subsidiaries on the full liability basis. As a consequence of the recently announced phased reduction in the rate of corporation tax, it has been considered appropriate to release £6,500,000 from this provision.

In the United Kingdom, operating profits of J. Henry Schroder Wagg & Co. Limited were higher than those for the previous year. Earnings of the banking division declined compared to 1982, when it benefited from the large fall in interest rates. However, profits of the corporate finance division were higher, and with buoyant conditions in stock markets around the world, the investment division had a record year. Schroder Assurance and Investment Holdings Limited performed well as did Schroder Investment Company Limited, whose capital profits compared favourably with 1982. The contribution to Group profits of Schroder Leasing Limited continued to be significant, even before taking credit for the release of deferred taxation referred to above.

Profits of our United States companies were higher than in 1982, after taking into account loss of interest and provisions against sovereign and commercial risks. The policy of containing the growth of commercial lending was continued, and as a result capital ratios were improved. Trust activities enjoyed significant growth while investment banking operations continued to concentrate on servicing the flow of overseas investment funds into the United States.

In Europe, J. Henry Schroder Bank AG, Zurich, generated record profits. Net interest income rose, as did commissions from lending and income from foreign exchange and bond dealings. The investment division expanded its portfolio management and trading operations, together with its underwriting and placing activities, particularly for Japanese borrowers.

In Australia, trading conditions for the Schroder Darling Group in the year to 30th June, 1983 were difficult and net profits were materially lower. However, it is anticipated that the net contribution for the year to 30th June, 1984 will be substantially higher than in the previous year.

Despite the uncertainties of the past year in Hong Kong, the earnings of Schroders & Chartered Limited were well in excess of those of the previous year. Schroder Asia Securities, which conducts a stockbroker business specialising in Far East securities, expanded rapidly. We aim to develop this company further and in particular to increase its research capabilities and its involvement in the distribution of stock to major institutional investors. Our associated company, Singapore International Merchant Bankers Limited, produced record results in each division, and profits were substantially higher than in the previous year, while in Japan our business continued to grow at an encouraging rate and earnings increased.

1983 was another difficult year for Latin America. Following the substantial provisions made in 1982 by Group companies in respect of Latin American exposure, we thought it prudent to increase these materially in 1983, because of the higher exposure arising from our participation in the reschedulings of the foreign debt of certain of the countries in the region, and to reflect a reassessment of certain risks.

The Group was able to benefit from the strength of securities markets around the world, and fee-earning activities were particularly successful. On the other hand, our prudent provisioning policy contributed to lower earnings from commercial banking activities.

One consequence of the structural changes taking place in the financial sector is that an ability to market and execute financial services on a global, integrated basis will become an increasingly important competitive factor. Schroders is especially well-positioned to achieve this, thanks to the significant involvement in major financial markets that we have achieved around the world. In order to exploit this advantage more effectively we have appointed five executives as Group Managing Directors with world-wide responsibilities for the Group's principal areas of activity.

Confidence in our business is founded upon the high quality of our staff around the world. Their talents and hard work were again proven last year, and I should like to thank them for all their efforts.

Group Companies, Associates and Representative Offices in:  
Australia - Bermuda - Bissau - Canada - Cayman Islands - Channel Islands - Colombia - Germany - Hong Kong - Japan - Lebanon - Singapore - Switzerland - United Kingdom and United States of America

If you would like a copy of the Report and Accounts, please write to:  
The Secretary, Schroders plc, 120 Cheapside, London EC2V 6DS.

UK COMPANY NEWS

Bunzl surges 36% to record £17m

WITH ALL divisions recording increased contributions, especially distributive and filters, pre-tax profits of Bunzl surged from £12.6m to a record £17.3m for the 1983 year, an advance of 36 per cent.

In the early part of the current year most activities are enjoying improved economic conditions and profits for the period are substantially ahead of those for the same weeks of 1983.

Shareholders benefit from the improved results. They divided for the year in being stepped up by 2p to 11p net per 25p share, an increase of 18.2 per cent.

A one-for-one scrip issue is also proposed.

Group turnover for 1983 advanced from £361.5m to £440.55m and was due largely to a more extensive nature of the distribution operations and a greater volume of business handled by the merchandising division.

Trading profits rose by £7.44m to £18.12m and these broke by division as follows—filters

£3.8m (£3.06m), non-filter activities £1.08m (£1.34m); merchandising £3m (£2.78m); Industrial £1.97m (£1.37m) and Distribution £6.61m (£2.87m). Central expenses accounted for £1.3m (£647,000).

Pre-tax profits were struck after adding in associates of £2.71m (£2.51m) and deducting £3.35m, against £172,000, for net interest and dividends.

Tax took £7.27m (£5.31m) and minorities £975,000 (£927,000) to leave an available balance of £3.35m, compared with £5.88m.

Earnings emerged at 33.3p (26.2p) with pre-extraordinary charges of £841,000 (£2.65m).

Mr Ernest Beaumont, group chairman, says the efforts of the past four years to reorganise Bunzl are now beginning to be reflected in rapid profit growth, earnings per share and return on investment.

He adds that the group is now as much a service and distribution company in pulp, paper and plastics, as a specialist manufacturer of filters, packaging and paper.

Shareholders are told that this new balance in group operations, together with the extent of the activities with the expanding U.S. economy, gives the directors "great confidence for the future."

The chairman explains that the group's new activity mix is strongly cash generating and because of this the year-end balance sheet had a debt/equity ratio of only 30 per cent, despite the sustained growth throughout the group in 1983, continued capital expenditure, acquisitions for cash and an associated goodwill write-off.

comment

Bunzl's transformation over the past three years is an object lesson in growth by acquisition. It picked a business—paper distribution—where it saw growth opportunities and which bore some relation to its existing activities. It correctly chose to go into the U.S. in the depths

of the recession and is now reaping the rewards of the rapid recovery. Most importantly, it has bought sound companies of a manageable size, where profits and a strong cash flow have been generated very quickly so the group's debt/equity ratio, now 30 per cent, has been kept under tight control.

For the future, more acquisitions are expected, though the emphasis is likely to move from the U.S. to developing paper distribution in the UK and Australia. Shareholders are already seeing the benefits of the group's careful strategy—since all but one of the acquisitions has been for cash not paper, there has been very little earnings dilution. In the current year, a strong performance all round is expected, taking pre-tax profits on the existing businesses up to perhaps £22m. The unexpected large dividend increase took a share up 23p to 46p, where there still looks good buy with a prospective p/e ratio of about 11.

£507,000 profit made by Palma

THE FUTURE is viewed with "considerable confidence" by Mr Peter Bailey, chairman of Palma Group, the private hosiery and knitwear manufacturer. The subsidiaries are "extremely busy" with very good order books, and the Montfort companies are no longer making losses.

Mr Bailey confirms that, as forecast, it is intended to pay a dividend of not less than 2p net for 1984.

Palma merged with Montfort (Knitting Mills) in a reverse deal last December, and the results for 1983 show an improvement over the forecasts made at the time.

Combined turnover came to £21.47m compared with £10.68m for 1982, and there was a turnaround from a loss of £268,000 to a profit of £507,000. After tax £141,000 (credit £78,000) the net profit is £368,000 (loss £288,000). There are extraordinary charges of £471,000 as expected, and dividends absorb £137,000 (£44,000). Earnings are shown at 1.83p (loss 9.89p).

Turnover of £11.73m Palma made a profit of £1.24m for 1983 against not less than £1.2m forecast, and had an extraordinary credit of £56,000. The Montfort companies produced a turnover of £9.7m and lost £728,000, but that compared with an estimate of not greater than £750,000. There were extraordinary losses of £471,000 as expected.

Mr Bailey says, rationalisation of the Montfort businesses has meant that trading losses of £458,000 have been reduced to £150,000, and that the large costs associated with the closures have been provided for.

The business of W. Reynolds and Co (Hucknall), which produced underwear and knitted leisurewear, has been sold and Harvey Knitwear has been closed. Both were owned by Palma, and their activities were not consistent with the core business of the enlarged group. Empty leased premises were purchased from the landlords and subsequently sold. The disposal will result in a net cash benefit to the group of some £400,000.

At the year-end the group had borrowings of £2.2m. Facilities are £4.5m, and the large investment programme scheduled for 1984-85, the chairman expects this will be financed from internal resources and well within the available facilities.

Conder cuts loss and sees big turnaround next year

NO FURTHER provisions were needed against the Iraqi operations of Conder International and, as expected, the company returned to profit in the second half of 1983. This cut the loss for the 1983 year to £4.68m.

In the first half overseas losses and provisions totalled £5.8m; but the second half has produced a significant change in trend and the management has arrested the major losses which have cost the group "so dearly" in the last two years. In 1982, the group incurred a loss of £838,000.

There is no dividend recommended for the year, but the company hopes to pay a modest interim for 1984. In the current year Mr R. T. Cole, chairman, expects some improvement in profitability compared with the second half of 1983, but says the "big turnaround will not feed through into the results before next year."

The mainstay construction business is profitable and healthy but the benefit of the re-orientation into structures and projects and of the large investment in computerisation will take a little time to show through. The diversification into property development, building products and water and effluent treatment plant is also progressing satisfactorily, but growth is absorbing most of the profits.

For the year, turnover came to £98.47m (£101.17m), split as to construction £54.68m (£58.24m) and products and systems £13.79m (£11.83m). The UK made £21.44m (£24.36m), Middle East and Asia £2.44m (£10.53m), Africa £3.44m (£5.15m), and elsewhere £1.05m (£1.11m). The net loss of £4.7m (£42,000) equals 5p (9p) per share.

The structures division, where the company acts as sub-contractor for steelwork and cladding, made a turnover of £48m. Although prices remained depressed, the business was profitable.

In the projects division, which undertakes the design and management of complete building projects, produced a turnover of £28m, and profits were satisfactory.

Lex looks at the implications of the weekend's agreement over the refinancing of Argentina banks and then moves on to examine the deal whereby Kleinwort Benson is buying a securities dealer in Chicago for \$23m. Finally the column comments on the 1983 profits from Reuters showing a 50 per cent increase at the pre-tax level but a very sharp rise in the overall tax charge. Elsewhere there is another dull performance from Conder but Bunzl keeps up its impressive growth on the back of a steady acquisition policy.

factory; the work was about equally divided between the public and private sectors.

Mr Cole says the company's success has been largely due to the efficiency of the Kingsworthy System which dramatically reduces both design and construction times.

Overseas, a "massive effort" was devoted, under extremely difficult conditions, to completing work in Iraq and securing payment. All the contracts are substantially finished apart from the maintenance period. Payment problems have been greatly eased by the grant of a loan to the company's principal customer by Morgan Grenfell. Export contracts in other parts of the world are being carried out profitably.

IBM CADAM (Computer Aided Design and Manufacture) systems are installed in the two major companies. Conder is confident of achieving a big competitive advantage from this large investment in cash and management effort but the full benefits will not be forthcoming until the end of this year.

The property development operation continues to be profitable.

In mechanical and electrical building services there was a shortage of work which was reflected in a reduced turnover of £8.3m (£10.6m). Prices were also very depressed and the division lost money. Steps have been taken to integrate the operation with the construction business and the division should at least break even this year.

Building products had a successful year with a turnover

Second-half fall leaves Molins £1.2m down

SECOND half pre-tax profits of Molins fell from £5.1m to £3.9m and left the figure for the whole of 1983 behind at £7.1m, compared with a previous £8.3m. Sales of this group which manufactures machinery for the tobacco industry and corrugated board machinery, were down from £134.1m to £129.9m.

The directors say it is difficult at this stage to give a reliable forecast for the current year, although indications are that 1984 profits may be somewhat lower than those of 1983.

They add that the company is steadily reaping the whole business so it can successfully meet the opportunities and hazards of the future.

Trading profits amounted to £7.6m, against last year's £9.3m, and were split as to tobacco machinery £12.3m (£13.7m) and corrugated board machinery £4.7m (£4.4m).

At halfway tobacco profits were up from £5.1m to £5.4m but reflected by rapid profit growth, earnings per share and return on investment.

He adds that the group is now as much a service and distribution company in pulp, paper and plastics, as a specialist manufacturer of filters, packaging and paper.

The effect of reduced market demand and adverse competitive conditions on the cigarette packing machinery business was the main factor in the reduction in sales volume and profitability of the tobacco division.

The directors say that difficult generally for machinery suppliers to the tobacco industry with some downturn in overall market demand and, consequently, intensified technical and price competition.

While the company expects some modest improvement in

corrugated board machinery demand in the current year, the directors feel it would be unwise to attempt to be specific about the outcome for the 12 months.

The dividend is unchanged at 7.9p net with a same-again final payment of 5.7p.

Profits for the year were after depreciation of £5.1m (£4.6m) and interest £0.3m (£1m).

Earnings per 25p share were 18.3p (£2.7p) and net tangible assets were given as 260p per share, compared with 251p.

Profits on a CCA basis were 23.5m (£22m).

comment

Hope must, yet again, be deferred at Molins. Its older tobacco machines are still losing their share of a highly competitive market, with second half sales a fifth lower. Meanwhile, the newer models—the SPI soft

pecker and the Mark 10 cigarette maker—are only now going to customers. Even that is small help short term as each machine sells at a loss as Molins patiently inches its way up the learning curve, a process likely to take at least a year. Despite progress on cost-cutting, profits from this side will be lower again in 1984.

In the U.S., Langston is at last seeing a pick up in demand, and losses should be lower. The management seems confident of making over £12m eventually. But this year the p/e ratio is likely to rise from 1983's 6.5, on the shares down 5p to 46p, over 7. The p/e ratio is likely to rise from 1983's 6.5, on the shares down 5p to 46p, over 7. The p/e ratio is likely to rise from 1983's 6.5, on the shares down 5p to 46p, over 7.

Arthur Wood reaches record £385,000

Pre-tax profits at Arthur Wood and Son (Longport) showed a marked recovery from £41,000 to a record £385,000 for 1983. The net single dividend has been lifted from 0.5p to 3p.

Turnover of this Stoke-on-Trent-based earthware manufacturer increased from £2.64m to £3.69m.

Earnings per 5p share grew from 1.66p to 11.89p.

Trading profits improved from £52,000 to £396,000 to which was added £19,000 (£14,000) of investment income. Last time there was an exceptional debit of £35,000.

Tax came to £150,000 (£5,000).

Frizzell Group increases by 30% to end at £4.5m

IMPROVED pre-tax profits of £4.53m compared with £3.44m have been produced by the Frizzell Group for 1983. Turnover increased from £14.74m to £15.87m.

Earnings per 25p share of this private company rose from 9.7p to 13.4p, and the dividend has been lifted by 1p to 4p.

Mr Colin Frizzell, chairman, says that shortly after the year end the company acquired the insurance broking interests of F. Boulton Group, which has a commission income of about £3.9m.

Commenting on the year Mr Frizzell says that his forecast of

a general improvement by Norman Frizzell Motor & General was realised.

In UK broking, Norman Frizzell UK completed its reorganisation and is settling down well. There are signs that the decline in income has finally halted and a return to trading profitability is in sight.

Norman Frizzell Life and Pensions had a profitable year. In financial services, Shawlands Securities continues to experience growing demand and produced record profits of £1.08m, an increase of 53 per cent.

Earnings and dividend lift by R. & H. Hall

A further pick-up in profits to £2.6m is reported by R. & H. Hall, Cork based grain merchant, for 1983. In view of the difficult circumstances existing in the Irish economy the directors regard the result as satisfactory. In the previous year the group made £2.09m.

Turnover expanded to £152.28m (£147.2m) and pre-tax profits to £1.45m (£727,000). The final dividend is 2.75p for a total of 3.75p (3.36p).

After tax £94,000 (£83,000) and minority £100,000, the net attributable profit of £1.2m (£1.46m) for earnings of 12.7p (£13.5p) per share. There is also an exceptional tax credit of £2.07m, equal to 12.55p per share.

**J. & H. B. JACKSON**  
p.l.c.

Highlights from the Statement by the Chairman, Mr. P. J. White.

The pre-tax profit for the year ended 30th September, 1983 was £3,679,000 (1982: £3,137,000). This figure included a surplus on sale of listed investments of £1,500,000 (1982: £225,000) and is subject to a taxation charge of £221,000 (1982: £91,000).

The Directors are recommending a final dividend for the year of 0.85p per ordinary share making that total for the year 1.70p (1982: 1.65p).

The year proved extremely difficult as excess capacity existed in all areas of our operations and this resulted in tight margins in every division. During the latter part of 1983 the recession which lasted for some three years appeared to have hit bottom and there was an increase in demand in some sectors.

**ENGINEERING DIVISION**  
During the last three years we have greatly reduced our exposure in general engineering by selling three companies and closing down one other. We now have a relatively small division consisting of a gear cutting company and a motor type and production machine company, fully equipped with the latest machine tools, and I am reasonably confident of an improvement in profitability during the rest of the year.

**PLASTICS DIVISION**  
We purchased Calsonic in the U.S.A. at the end of the last financial year for 4.9 million dollars. The results for the first four months have been up to our expectations and we are sure that this will prove a good investment.

**MERCHANTING DIVISION**  
Demand has improved in this division but, with heavy discounting taking place in the motor distribution

sector and reduced tonnages of scrap being produced by engineering companies, profit margins remain under pressure.

Jackson Leasing Ltd., a vehicle leasing and contract hire company had a successful first year and will produce better figures this year.

**INVESTMENTS**  
The return from the investments to which I referred last year turned out to be higher than expected, with income plus capital profits amounting to £2.4million. Although our investments have performed well for the first four months of the current year I feel that, with the relatively high level of stock markets, a more cautious view must be taken and therefore I would not expect a repeat performance of last year.

**FORGING DIVISION**  
Unfortunately there has been no improvement in demand for aircraft forgings, although there has been a noticeable increase in the number of enquiries received in the new year. As and when these enquiries turn into orders we will be involved in producing a considerable amount of new tooling and prototypes, which initially will not help the division's profitability. Therefore with four months of the current year already gone it is difficult to be optimistic regarding profits for the year to September, 1984.

**GENERAL SITUATION**  
As you will have gathered from the above the group will not show any substantial headway until there is an improvement in demand for aircraft forgings. In previous cycles this has usually materialised some 12 to 18 months after a general upturn in the economy and hopefully this cycle will be repeated, in which case it will be possible to look forward to 1985 with more confidence.

COMPANY NEWS IN BRIEF

In a report on the progress at Neepawa and managing director Mr S. Speight says the major rationalisation is completed, and he believes the company is in a positive mood to look forward to growth in activity and profits.

Much has still to be done but he feels certain that the coming year will be a successful one for the company on its way to a prosperous future. After three years of substantial losses the group returned to a small profit in the half year ending September 30, 1983.

Mr Speight feels this is the right time to prepare for the future by a new appointment which enables him to relinquish part of his duties and as from April 1 Mr Frank Wright has become managing director. Mr Speight will stay as executive chairman until the end of next March. Mr Wright is a possible for him to relinquish full time executive duties.

With the increasing level of demand in the export market continuing in 1984, Mr R. F. Needer, chairman of Needer's, concholate maker, says in his annual statement that he is confident the current year will show a reasonable increase in profit.

As known, pre-tax profits for 1983 increased from £135,193 to £190,065 on turnover of £2.67m (£2.69m).

He tells shareholders that there seems no immediate prospect of a major improvement in the level of UK demand for sugar confectionery.

The company has, however, been able to take advantage of the buoyancy of the chocolate confectionery sector by launching a range of three chocolate flavour crisp bars which has met with "considerable success."

Profits before tax of Pirelli UK totalled £9.7m for 1983, a swing of £11.26m on the loss of £1.99m incurred in 1982. Turnover rose from £30.28m to £307.55m.

The various Pirelli companies in the UK were reorganised at the beginning of 1983 and the results for 1983 are promising, reflecting the 1982 results and the position as at the end of that year as they would have appeared if the reorganisation had taken place at the beginning of 1982 and as if the company had received dividends from subsidiaries equal to its actual profits for that year.

Pirelli UK, a subsidiary of Societa Internazionale Pirelli SA of Switzerland.

Profits before tax of Boston Trust and Savings, the UK consumer finance subsidiary of the Boston Trust, exceeded £1m for the first time for 1983, and were more than double the previous record of £0.48m achieved in 1981. Total assets grew by over 30 per cent to £48m.

There seems to be little apparent slackening in demand for the company's services and plans are to increase the number of in-store money centres it operates with leading UK department store groups and to add to its high street coverage in new geographical areas.

Sir Kirby Laing, chairman of Laing Properties, says in his annual report that the company is well positioned to maintain results on a reasonable trend for some time to come.

In the longer perspective the company's main concern will be to generate alternatives to conventional development in the UK to keep up the momentum in North America and generally pursue diversity and flexibility as the best means of responding to market changes.

Amalgamated Estates deficit up

In the half year ended September 30, 1983, the pre-tax loss at Amalgamated Estates, property investor, rose from £29,765 to £92,257. It was running at a similar level to that of the year ended March 31, 1983, and efforts were made to reduce the losses by selling properties and cutting overheads.

The effect of these and the disposal of the investment in the £1.2m rights issue of last October will not show until the results are available for the second half. In the half year rental income

came to £294,964 (£274,074), sale of dealing properties to £423,802 (nil), and loss on disposal of investment properties to £18,178 (nil). Last time there was a loss in the hotel television activity of £162,704.

Sale of part of the investment properties sold were at valuations and the loss in respect of legal and agents fees. There is an "extraordinary" credit of £29,765 being disposed of the £1.2m rights issue of last October will not show until the results are available for the second half. The contract for the purchase

by Linden Holdings of 19.3 per cent of the Amalgamated Estates' ordinary capital from Promotions House was not completed on March 30, and consequently Mr D. Abill, Mr I. Shah, Mr S. Shah, and Mr M. Harvey have resigned from the board. The rest of the board—Mr C. Freemantle, Mr D. Pearl (who has been appointed chairman), and Mr A. Taylor—will be making an announcement next week in connection with their plans for the company's future.

Albright & Wilson Ltd  
PROGRESS IN 1983

	£ million	1983	1982
Sales		570.2	520.1
Trading Profit		41.3	24.7
Capital Expenditure		24.5	18.6
Net capital employed (end of year)		223.9	238.3
Return on capital (%)		18.4	10.4

These figures relate to the group managed by Albright & Wilson, including companies owned directly by Albright & Wilson.

● Under the Company's rationalisation programme, Resins & Organics Division was added and the agricultural chemicals, aryl phosphates and toluene chemical businesses were sold, following the sale of the Bush Bosche Allen operations in September 1982.

● The continuing business showed a rise of 11% in sales and 46% in profits over 1982. All Divisions contributed to the increase in profits, the largest improvement coming from the UK but with overseas companies still providing the greater part of the total profit.

● UK exports in 1983 rose to £110 million, with the continuing businesses showing a 20% increase over 1982.

● Phosphates Division obtained two Queen's Awards for exports and for technology.

● Major capital expenditure projects were commenced in the UK, for the upgrading of phosphatic acid

ALBRIGHT & WILSON International in chemicals  
1 Knightsbridge Green, London SW1X 7QD

**Adams & Gibbon Plc.**

Extracts from the Chairman's Review

The group net profit before taxation earned in the year ended 30th November 1983 amounted to £524,000, compared with £330,000 in 1982 and with £227,000 in 1981.

The Directors appear to be making progress in their efforts to improve overall operational efficiency of the group with almost every branch making an improved earnings contribution.

The Vauxhall Opel share of the national new car market increased materially during 1983 and this factor has also been reflected in our improved performance.

The 1984 financial year has started reasonably well with a continuation of the trend of a strong demand for Vauxhall Opel products although the margins being achieved reflect a very competitive trading situation. The Board is confident and optimistic that continued progress will be made by the group during 1984.

**A&G**  
Vauxhall Opel, Bedford, Austin Rover, Toyota.

**DIVIDENDS ANNOUNCED**

Company	Current payment	Date	Corre- Total	Total
			div. year	last year
Conder Int'l	Nil	July 2	4.5	11
R. & H. Hall	2.75	—	Nil	1.5
Mellorware	1.85	—	2.61	3.78
Molins	5.7	May 29	5.7	7.9
Manitex Props	9.88	—	9.07	9.07
DKR Int'l	3	May 1	3.15	12.45
Arthur Wood	3	—	0.5	0.5

Dividends shown pence per share net except where otherwise stated.  
\* Equivalent after allowing for scrip issue. † On capital increased by rights and/or acquisition issues. ‡ USM stock. § Unquoted stock. † Gross through out.

**ROTHSCHILD ASSET MANAGEMENT (CI)**  
51 Julian's Court, St Peter Port, Guernsey (041) 26741

**O.C. INTERNATIONAL RESERVES LIMITED**

Currency	AS 15.00	Launch Date
Australian Dollars	AS 15.00	—
Danish Krone	DKR 150	—
Hong Kong Dollars	HK\$ 100	—

Daily Dealings

**NOTICE TO HOLDERS OF BRIDGESTONE TIRE CO., LTD.**  
(Incorporated in the Netherlands)

5% per cent Contingible

NOTICE IS HEREBY GIVEN that: 1. Effective as from April 1, 1984, BRIDGESTONE TIRE CO., LTD. has changed its name to BRIDGESTONE CORPORATION. 2. The above-mentioned Bonds will remain valid under the Company's previous name but governed by the law of the Netherlands. Shareholders will continue to hold their shares in the name of the Company. 3. The Bonds will not be stamped or exchanged for new Bonds. 4. A supplementary legal notice as well as a list of the shareholders of the Company as at the date of this notice is enclosed with this notice.

BRIDGESTONE TIRE CO., LTD. (formerly known as BRIDGESTONE CORPORATION)  
Date: April 3, 1984.

**Granville & Co. Limited**  
Member of NASDIB  
27/28 Lovat Lane, London EC3R 5EB Telephone 01-621 1212

**Over-the-Counter Market**

1983-84	High	Low	Asst. Cont. and	Price	Change	Gross	Yield	P/E
						div. (p)	%	Fully
152	178	177	Asst. Cont. and	141	8.4	5.0	7.6	5.9
78	82	81	Alfreding Group	85	—	8.1	16.8	16.8
200	215	214	Bank of America	222	—	7.2	12.1	28.1
322	341	340	Barrington Hill	350	—	5.0	2.5	10.2
200	187	186	Bury Technologies	182	—	1.7	1.3	—
450	450	450	CCCL (T) Conv. Pref.	450	—	1.7	1.7	—
152	152	152	CCCL (T) Conv. Pref.	152	—	1.7	1.7	—
249	249	249	Carborundum Abrasives	249	—	1.7	1.7	—
45	45	45	Deborah Services	45	—	1.7	1.7	—
20	20	20	Frank Horne Ltd	20	—	1.7	1.7	—
195	195	195	Frank Horne Ltd	195	—	1.7	1.7	—
88	88	88	Frederick Parker	88	—	1.7	1.7	—
88	88	88	George Blair	88	—	1.7	1.7	—
2150	2150	2150	His New Fully Pd. Ord	2150	—	1.7	1.7	—
121	121	121	Int. Com. Pref.	121	—	1.7	1.7	—
247	247	247	James Burrough	247	—	1.7	1.7	—
375	375	375	Minihouse Holding NV	375	—	1.7	1.7	—
17	17	17	Restat Jenkins	17	—	1.7	1.7	—
74	74	74	Scruttons A	74	—	1.7	1.7	—
120	120	120	Torrey & Carlisle	120	—	1.7	1.7	—
44	44	44	Travel Holdings	44	—	1.7	1.7	—
25	25	25	Uniclock Holdings	25	—	1.7	1.7	—
52	52	52	Water Alexander	52	—	1.7	1.7	—
29	29	29	W. S. Vazee	29	—	1.7	1.7	—



MINING NEWS

Vaal Reefs plans record capital spending

Harbour Lights ready to go with 5.5m tonnes

BY KENNETH MARSTON, MINING EDITOR

THE capital spending programme announced for this year at the Anglo American Corporation group's Vaal Reefs gold and uranium mine is the highest on record says the chairman, Mr Peter Gush in the annual report.

FIRST ore reserves are based on a 1.5 gramme cut-off grade and an estimated mill recovery rate of 90 per cent. Using 500,000 tonnes per year as the most likely production rate, Esso estimates head grades at 3.5g and 5g gold per tonne respectively for the first two years of operations.

This conservative estimate is based on a 1.5 gramme cut-off grade and an estimated mill recovery rate of 90 per cent. Using 500,000 tonnes per year as the most likely production rate, Esso estimates head grades at 3.5g and 5g gold per tonne respectively for the first two years of operations.

water resources are available to satisfy all the proposed mining and processing needs.

These reserves include those at Harbour Lights West but refer only to the proposed open-pit operation. They do not include the deeper ore reserves which are known to exist but which have not yet been evaluated.

In London yesterday shares of Carr Boyd, which jumped to 145p in January of last year on the announcement of high grade drilling results at the Harbour Lights property, gained 2p to 78p in a sharemarket generally subdued by the easier bullion price.



THE FRIZZELL GROUP LIMITED

'Group profits advance 30%

reports Colin Frizzell, Chairman, in his statement with the Report and Accounts for the year to 31 December, 1983.

1983 Group profit advanced 30% to a record £4,526,000 and trading profit included in that figure increased by almost 100%.

Earnings per share rose to 13.4p from 9.7p.

Dividends increased to 4.00p per share from 3.00p.

U.K. Broking Division has now completed its reorganisation and is settling down well. Contractors' insurance again produced encouraging results. Life & Pensions had a particularly profitable year and advantage has been taken of a substantial opportunity for expansion.

Motor and General Division showed a general improvement, resulting largely from increasingly better service to clients.

Financial Services Division. Shawlands Securities experienced growing demand for all aspects of its services. The company had record profits again this year, up 53% to over £1m for the first time.

International Broking Division. Frizzell Hicks, predominantly involved in Marine Hull insurance, again contributed very satisfactorily.

Special Services Division. Newly formed to accommodate specialist joint venture subsidiaries. Norman Frizzell Professional Indemnity - again another highly successful year in the field of errors and omissions insurance.

Acquisition. Insurance Broking interests of the F. Bolton Group acquired with turnover of £3.9m, taking the Group into the areas of Aviation Reinsurance, Marine Cargo, Farming and American dollar surplus line placements direct into London.



Copies of the Report and Accounts are available from The Secretary.

The Frizzell Group Limited

Registered Office: Frizzell House, 14-22 Elder Street, London E1 6DF.

Bindura losses sharply ahead

ZIMBABWE'S Bindura Nickel Corporation, the country's sole nickel producer since the closure two years ago of the Empress mine, incurred a sharply higher net loss of £28.3m (£5.8m) in 1983. This compares with the net loss of £24.3m in 1982, reports Tony Hawkins in Harare.

South Africa's Anglo American Corporation, said that the rise in turnover reflected the 30 per cent depreciation of the Zimbabwe currency since 1982, and also a reduction in metal stocks. The company sold 12,400 tonnes of nickel last year, which was 2,300 tonnes above the year's production.

Bindura said that the net loss would have been £22.5m higher had interest been payable on the loan from its parent company, Anglo American of Zimbabwe. Interest will be payable on this loan from next year. The company's hopes of a return to profitability and the payment of dividends, both of which look to be several years away, are pinned to a rise in nickel prices. Bindura estimates that a rise of 10 cents per pound in the nickel price adds something like £22.25m to revenues.

Negotiations progress at Broken Hill

FOLLOWING an "action first" talk line, the Australian mine managements and unions at Broken Hill in New South Wales are now locked in negotiations, but neither side is prepared to comment on progress at this stage.

Nippon Mining finds high precious metal values

PROMISING GOLD and silver veins have been discovered by Toyoha Mining, a wholly-owned subsidiary of Nippon Mining, at a mine near the town of Sapporo on Hokkaido Island, the northernmost island of the Japanese archipelago.

Record profits of perhaps ¥20bn are predicted for the year to March 31, 1985, on the back of a recovery in non-ferrous metal prices and falling oil prices.

At the weekend, a mass meeting of the miners voted to give their union executive full authority to negotiate a settlement of the wage dispute.

News agency reports put the gold values at between 43 and 120 grammes per tonne, extremely high by world standards, along with between 1,600 and 4,200 grammes of silver.

Hamilton Oil Corporation has received acceptances of its offer for Hamilton Oil Great Britain in respect of 61,899,402 shares, representing about 87 per cent of capital.

The chairman based his hopes on a broad-based improvement in metal prices, and higher earnings from the group's growing aluminium interests.

Toyoha Mining is currently mining 35,000 tonnes of ore a month containing silver, lead and zinc in nearby mines.

The offer is declared unconditional in all respects, and will remain open.

The unions, which are pressing for higher wages and shorter working hours as part of a new three-year wage deal, embarked on a strike.

Meantime, Nippon Mining has said that it will report a sharp fall in profits for the year to March 31, with profits down 37 per cent to ¥7bn (£21.5m) from 1982-83's ¥11.12bn.

The decline is attributable to the high price of imported oil early last year and a stagnation in both domestic and overseas copper demand.

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1784 THE FIRST NATIONAL BANK OF BOSTON

In Brief

AMERICA'S AMAX has now returned to profit after two consecutive years of loss. Mr Pierre Gousseland, chairman, has told news agencies in an interview that he expects the big group to be back in profit in the first quarter of this year, compared with earlier forecasts of an overall 1984 profit.

Mining has entered a gold exploration and development joint venture with Australian Anglo American at an area 2.5 km from Pancontinental's Paddington gold project in Western Australia.

The U.S.\$50m (£25.3m) Areo diamond venture in Guinea is to start production on schedule next week despite the postponement of the ceremonial opening following the death of President Touré.

The operator for the project, Australia's Bridge Oil, reports a half-year operating profit of A\$3.4m (£2.3m) from its Cooper Basin and Surat Basin Oil activities against a loss of A\$1.75m a year ago.

Phillex Mining Corporation, one of the "big five" producers in the Philippines, made net profits last year of Pesos 290m (£14.5m), up from Pesos 178m in 1982, with Pesos 30m of the latest figure coming from investment income.

Nevertheless, Phillex has decided to defer an ambitious plan to exploit ore from deeper levels at its mine in Tubao Town, Mountain Province, on the main Philippine island of Luzon.

Instead, according to Mr Henry Brimo, president of Phillex, the present minefield will be augmented by 5,000 tonnes of higher-grade ore per day from the middle of next year.

Compagnie Royale Asturienne des Mines, the Belgian metals processing and mining group, has returned to profit, with net earnings of Bfr 13.4m (£175,000) for 1983 compared with a net loss of 1982 of Bfr 61m.

As before, no dividend is to be paid. Asturienne is associated with the big holding company Societe Generale de Belgique.

Forum Hotel Budapest advertisement with contact details and location information.

Table of BASE LENDING RATES for various banks and currencies.



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# SECTION III - INTERNATIONAL MARKETS

# FINANCIAL TIMES

Tuesday April 3 1984

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**WALL STREET**

## Argentine accord helps ease fears

**THE SUCCESSFUL** outcome of the Argentine debt negotiations, together with further evidence on the strength of the U.S. economy, brought firmness in both stock and bond markets on Wall Street yesterday, writes Terry Byland in New York.

The credit sector was hesitant, however, after the announcement of a 6.9 per cent jump in construction orders in February reawakened all the old fears of an overheating economy.

But the market drew encouragement from the Federal Reserve's disclosure on Friday that it has not been tightening credit policies.

The stock market opened firmly after both the February construction figures and a report from U.S. purchasing managers had indicated that the economy was still pushing ahead strongly. But investors remained cautious and stock prices were unable to extend early gains.

By 3pm the Dow Jones Industrial Average was down 16.33 at 1,148.56. Turnover was moderate.

Wall Street is looking forward to the second quarter of the year with some recovery of confidence, albeit cautious.

The short-term outlook for interest rates remains cloudy: the federal funds rate edged up again yesterday and the prospect of another rise in prime rates by the banks was not ruled out in the credit market.

However, the stock market seems to have discounted any further move in prime rates, or even in the Fed's discount rate, and there are expectations that upward pressures on interest rates will slacken as the expected slowdown in economic expansion begins to show through.

The early advance in the market was undermined at mid-session when the federal funds rate moved from an opening 10 per cent, to 10 1/2 per cent and then back to 10 per cent.

The absence of any customer repurchase announcement when the funds rate touched 10 1/2 per cent immediately suggested to the market that the Fed might have raised its funds target range at last week's meeting of the open market committee.

Dr William Griggs, of Griggs and Santow, the credit market specialists, commented that the market moved in anticipation of a new Fed target range of 7 per cent, which would set a benchmark of 10 1/2 per cent for daily trading.

The bond market turned down and stock prices slipped from their best levels. Among major issues left hanging on to small gains, IBM at \$114 1/4 was 5 1/2 up, AT & T 5 1/4 higher at \$15 1/4, and General Motors 3/4 up at \$65 1/4.

The substantial rise in orders for the construction industry - the February increase was down 16.33 at 1,148.56. Turnover was moderate.

Wall Street is looking forward to the second quarter of the year with some recovery of confidence, albeit cautious.

Other heavy industrials to show minor gains included Ford Motor, 3/4 higher at \$37 1/4; International Paper, 3/4 up at \$53 1/4; and Raytheon, \$1 better at \$38 1/4.

In the banking sector, the Argentine debt agreement, which has avoided serious write-offs against the earnings of U.S. creditor banks, brought a gain of \$1 1/4 to \$36 1/4 in Manufacturers Hanover and of 3/4 to \$34 1/4 in Citicorp, the two which carry the major burden of the debt.

A sprinkling of features included a rise of \$2 1/4 to \$33 in Tandy, operator of the Radio Shack outlets for home computer sales, which is buying in 10m of its shares.

Walt Disney shed \$1 1/4 to \$65 1/4 as speculators tried to decide how to read the success of Mr Saul Steinberg - who recently bought a stake in Disney - in selling his Quaker State Oil holding back to the Quaker board.

While some hoped this would free Mr Steinberg to bid for Disney, others noted that he has usually preferred to sell share stakes back at a profit, rather than proceed to outright takeovers.

But the most active speculative issue was Carter Hawley Hale, the major store retailer which owns the Newman-Marcus Chain. BAT Industries - the UK tobacco group which already has a major stake in U.S. retailing through its ownership of Gimbels, Saks Fifth Avenue and Marshall Field - was rumoured as a possible bidder. Carter Hawley rose \$1 1/4 to \$25, valuing the group at \$875m.

Other suggestions were that the Los Angeles store group might be the target for a leveraged buyout.

## TOKYO

## Six of the best but slacker pace

Reflecting Hitachi's strong performance, other international populars gained ground, with Matsushita Electric Industrial surging Y50 to Y1,950 and Toyota Motor Y40 to Y1,410.

Konishiroku Photo was bought heavily in early trading on its development of a colour printing paper which is claimed to preserve printed colours for 100 years. The stock registered a maximum allowable rise of Y100 to Y765.

Bond prices firmed due to optimism about the future movement of U.S. interest rates and the yen's firmness against the dollar.

Although trading in the over-the-counter bond market was relatively slow, the yield on the benchmark 7.5 per cent government issue, due in January 1985, fell further to 7.145 per cent from Saturday's 7.16 per cent.

BUYING interest among institutional and individual investors remained strong in Tokyo yesterday, leading the Nikkei-Dow market average to another all-time high for a sixth consecutive session, writes Shigeo Nishiaki of Jiji Press.

The market was dominated by considerable buoyancy in early trading, with advances by some international populars, non-ferrous metals, non-life insurances and securities houses.

The Nikkei-Dow climbed 81.78 from Saturday to 11,050.19, surpassing the 11,000 level for the first time. The index has thus gained 568 points in the past six sessions. But turnover decreased sharply to 859.89m shares from last Friday's 946.58m, reflecting growing concern over restrictions on margin trading and a possibility of a reactionary drop. Advances outnumbered losses 391 to 290, with 133 issues unchanged.

Spirited by steady economic recovery and strong business performance, many investors seemed determined to continue to buy equities until prices peaked, although they were concerned about rises being too rapid and a possible strengthening of curbs on margin transactions by the Tokyo Stock Exchange.

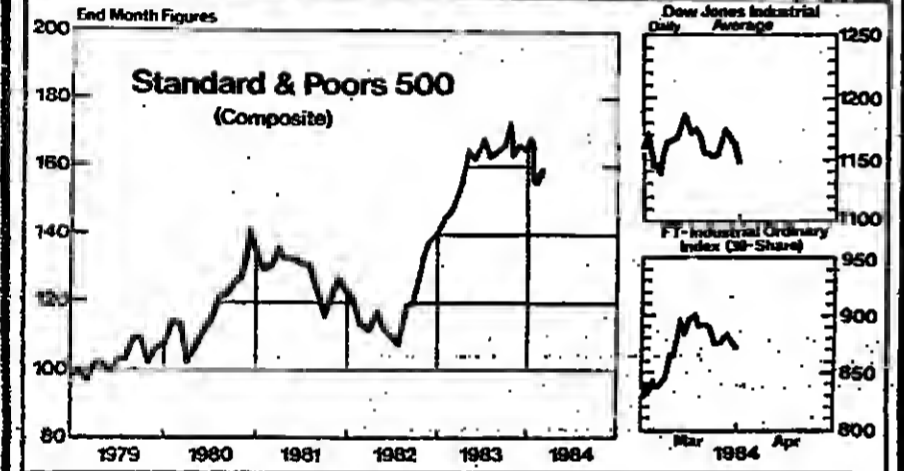
Non-ferrous metals drew popularity, with Nippon Mining rising Y15 to Y480 on heavy buying, prompted by its announcement of a promising gold mine discovery. Mitsubishi Metal was up Y33 to Y728, Sumitomo Metal Mining Y50 to Y1,650 and Dow Metal Y15 to Y624.

In sympathy with last week's gains in city bank stocks, non-life insurances and securities houses attracted buyers. Tokio Marine and Fire Insurance firmed Y43 to Y706 and Sumitomo Marine and Fire Y40 to Y582. In the securities sector, Nomura spurted Y65 to Y950, Nikko Y83 to Y590, Daiwa Y41 to Y820 and Yamachi Y42 to Y596.

The giant electronics maker Hitachi turned in an erratic performance, gaining Y24 in early trading, slackening and then closing at a record Y984, up Y15 from last Saturday. The previous peak of Y980 was reached last Friday.



### KEY MARKET MONITORS



STOCK MARKET INDICES			
	April 2	Previous	Year ago
<b>NEW YORK</b>			
DJ Industrials	1148.56*	1154.89	1130.03
DJ Transport	505.14*	510.19	507.39
DJ Utilities	126.25*	126.83	124.54
S&P Composite	158.99*	159.18	152.96
<b>LONDON</b>			
FT Ind Ord	870.8	877.0	854.0
FT-SE 100	1109.1	1112.5	877.8
FT-A All-share	522.95	524.20	412.09
FT-A 500	564.19	565.94	446.82
FT Gold mines	651.3	658.9	582.5
FT-A Long gilt	10.09	10.05	11.30
<b>TOKYO</b>			
Nikkei-Dow	11,050.19	10,965.41	8469.0
Tokyo SE	876.62	871.32	615.13
<b>AUSTRALIA</b>			
All Ord.	749.1	750.5	512.7
Metals & Mins.	529.3	530.4	469.3
<b>AUSTRIA</b>			
Credit Aktien	55.31	55.14	53.28
<b>BELGIUM</b>			
Belgian SE	146.72	146.78	116.18
<b>CANADA</b>			
Toronto Composite	2385.6*	2382.1	2156.0
Montreal Industrials	432.8*	432.33	362.84
Combined	406.02*	405.13	358.63
<b>DENMARK</b>			
Copenhagen SE	182.22	181.61	133.21
<b>FRANCE</b>			
CAC Gen	164.1	163.7	114.8
Ind. Tendancy	104.6	104.7	72.8
<b>WEST GERMANY</b>			
FAZ-Aktien	348.41	348.69	301.44
Commerzbank	1022.6	1022.3	909.0
<b>HONG KONG</b>			
Hang Seng	1023.96	1014.38	996.01
<b>ITALY</b>			
Banca Comm.	217.25	218.85	212.81
<b>NETHERLANDS</b>			
AJP-CBS Gen	183.0	161.1	127.1
AJP-CBS Ind	131.5	130.1	108.4
<b>NORWAY</b>			
Osto SE	268.93	262.78	153.63
<b>SINGAPORE</b>			
Straits Times	961.45	994.44	867.85
<b>SOUTH AFRICA</b>			
Gold	1022.0	1011.0	758.5
Industrials	1062.3	1066.8	834.8
<b>SPAIN</b>			
Madrid SE	closed	118.96	112.37
<b>SWEDEN</b>			
J & F	1579.74	1567.26	1239.4
<b>SWITZERLAND</b>			
Swiss Bank Ind	369.7	368.3	314.2
<b>WORLD</b>			
Capital Int'l	March 30	Prev	Year ago
	189.8	189.0	165.6

CURRENCIES			
	U.S. DOLLAR	STERLING	
(London)	April 2	Previous	April 2
\$	2.602	2.5985	3.75
DM	224.6	224.4	322.5
Yen	8.0065	7.9775	11.49
SwFr	3.154	2.15	3.095
Guil.	2.937	2.922	4.2175
Lira	1816.5	1814.0	2327.0
BP	53.12	53.06	76.25
CS	1.27525	1.27725	1.8305

INTEREST RATES			
	U.S. DOLLAR	STERLING	
(London)	April 2	Previous	April 2
3-month offered rate	9	9	3 1/2
SwFr	3 1/2	3 1/2	5 1/2
DM	5 1/2	5 1/2	14
FFr	14	14	

U.S. BONDS			
	Price	Yield	Price
Treasury	April 2	Prev	Yield
11 1/2 1986	99 3/4	11.53	99 3/4
12 1/2 1991	99 3/4	12.45	99 3/4
11 7/8 1993	99 3/4	12.50	99 3/4
12 2013	99 3/4	12.52	99 3/4
<b>Corporate</b>			
AT & T	Price	Yield	Price
10% June 1990	91	12.50	91
3% July 1990	71	10.30	70 1/2
8% May 2000	71 1/2	13.05	71 1/2
Xerox	10% March 1993	88 1/2	12.85
Diamond Shamrock	10% May 1993	87 1/2	13.05
Federated Dept Stores	10% May 2013	81 1/2	13.15
Abbot Lab	11.80 Feb 2013	90	13.50
Alcoa	12% Dec 2012	91	13.50

FINANCIAL FUTURES			
	Latest	High	Low
CHICAGO	Latest	High	Low
<b>U.S. Treasury Bonds (CBT)</b>			
8 1/2 32nds of 100%	June	66-11	66-09
<b>U.S. Treasury Bills (TBM)</b>			
\$1m points of 100%	June	90.00	89.99
<b>Certificates of Deposit (CDM)</b>			
\$1m points of 100%	June	89.17	89.16
<b>LONDON</b>			
<b>Three-month Eurodollar</b>			
\$1m points of 100%	June	89.12	89.13
<b>20-year Notional Gilt</b>			
£50,000 32nds of 100%	June	108-21	108-20

COMMODITIES			
	April 2	Prev	
(London)	April 2	Prev	April 2
Silver (spot fixing)	876.20p	870.15p	
Copper (cash)	£1090.50	£1081.50	
Coffee (March)	£2063.00	£2052.50	
Oil (spot Arabian light)	\$28.45	\$28.45	

**LONDON**

**THE OPTIMISTIC** outlook provided on export prospects by the Confederation of British Industry failed to generate any enthusiasm in London and leading shares, after a promising start, gave up small gains to close widely lower on the session.

The FT Industrial Ordinary index captured the early firmness with a gain of 1.8. But the advance was given up, and by the close the index was down 6.2 on the day at 870.8, its lowest level since March 14.

Commercial Union Assurance continued to attract demand, however, on speculation that the group was about to dispose of its U.S. interests. It closed up 5p at 231p, after 23p.

Slightly better U.S. bond values late on Friday encouraged a steady opening tone in government securities. But sterling's renewed easiness against the dollar later exerted selling pressure and longer-dated gilts moved progressively easier to close a net 1/2 lower in places. The shorts were similarly affected and settled with falls ranging to 1/4.

Chief price changes, Page 28; Details, Page 29. Share information services, Pages 30-31.

**HONG KONG**

**THE SLIDE** in share values in Hong Kong was apparently judged to have gone far enough yesterday.

The market again opened easier with the Hang Seng index dipping a further 32.55 to 961.45 at mid-morning. However, at this level, both local and foreign investors decided the time was ripe to re-enter the fray as bargain hunters, boosting the index to 1,023.96, for a gain on the day of 9.56.

The index was still 94.89 down on last Wednesday's close, however, which reflected sentiment ahead of Jardine Matheson's plan to transfer its ultimate holding company to Bermuda.

**SINGAPORE**

**INTEREST RATE** uncertainties in the wake of recent rises in bank prime rates left Singapore lower.

Projections from Bank Negara that large budget and current account deficits would retard Malaysian economic growth also depressed sentiment.

The Straits Times index fell 12.99 to 961.45, although much of this decline was attributed to a steep 66 cent drop in Times Publishing to S\$8, on profit-taking following its one-for-four scrip issue.

**AUSTRALIA**

**QUIET TRADING** greeted the first day of deregulated brokerage rates in Sydney, and shares ended mixed.

The All Ordinaries index which was down more than 4 at one stage, rallied to end 1.4 easier on the day at 749.1.

BHP fell 10 cents to A\$14.30 ex-rights in response to Friday's sharp rise which followed its strong third-quarter profit results.

**SOUTH AFRICA**

**THE COMBINATION** of an easier world hullion price and a firmer rand left gold and industrial shares lower in Johannesburg.

Among the major gold producers Kloof fell R2.25 to R63.25, while mining financials and other precious metals and minerals issues tended easier in sympathy.

Gencor slipped 25 cents to R27.25, De Beers 30 cents to R9.75 and Rustenburg Platinum 10 cents to R15.20.

**CANADA**

**MODEST** gains by the oil, metals and utilities sectors more than offset a sharp reverse by golds in Toronto and the market traded marginally higher.

In Montreal, small advances were achieved by industrials, utilities and banks, hut papers were slightly easier.

## EUROPE

## Ready but still waiting

**ISOLATED** corporate events provided the only pointers to trading enthusiasm yesterday in a session which left the European bourses much as they started - attuned to any further glimmers of a Wall Street revival, generally holding steady, but bereft of the volume of business needed to fuel a substantial advance.

Brussels held up well in the face of the general strike called for today to oppose the implementation of the austerity

package enacted at the weekend. The exchange's general index edged just 0.06 lower at 148.72, while a BFr 50 fall in market leader Petrofina at BFr 7,230 was viewed by local operators as indicating no fundamental disquiet.

UCB in chemicals was among those to gain, up BFr 45 to BFr 4,670. A maintained net dividend from retailer GB-Inno-BM brought it a BFr 5 firmer result at BFr 3,120.

Advances in Amsterdam led declines two-to-one as Royal Dutch added Ft 2 to Ft 154.60 and Philips, amid its moves to adjust to the video recorder market, regained the Ft 50 level with a rise of 80 cents.

A jump of Ft 2.80 in builder Bos Kalis at Ft 43.80 was attributed to the international debt accord with Argentina, where it has sizeable projects under way.

Domestic bonds were barely franked. Caution continued to dominate Frankfurt, with flat industrial output figures for February failing to help. Among the few to attract decent demand was Volkswagen, DM 3.30 higher at DM 210.60.

Thyssen could draw no impetus from its forecast of a break-even on non-steel operations this year and the endorsement of its strategy by shareholders, and slipped 60 pf to DM 84.

A steady bond market allowed the Bundesbank to sell DM 16.9m in paper.

The start of spring holidays left Paris even quieter than recently, and among the few centres of activity was Michelin, as speculation surrounded the fate of the French Dunlop subsidiary. The rival tyre maker put on FFr 30 to FFr 885 in a market where declines had a small overall lead on advances.

A weak area was Creusot Loire, off FFr 2.40 at FFr 35.10.

Good Stockholm liquidity brought widespread gains neglecting only the drug sector, where Pharmacia shed SKr 4 to SKr 292. A change of corporate tack at Volvo was accompanied by a SKr 3 rise to the SKr 500 mark, while Skanska Cement jumped SKr 16 to SKr 576.

Selective foreign demand was felt in Zurich - identified particularly in Swissair, up SwFr 35 to SwFr 1,100, and in the major banks. UBS added SwFr 50 to SwFr 3,530.

In a quiet bond market a new 4 1/2 per cent federal issue ended its first day at 96.65 per cent, off 45 basis points from the issue price.

Milan was beset by nerves as a judicial investigation into alleged financial improprieties extended to Italmobiliare - stock in which slid LA,550 to LA7,000.

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AMERICAN STOCK EXCHANGE COMPOSITE PRICES

Prices at 3pm, April 2

Main table of American stock exchange composite prices, listing various stocks with columns for 12-month high/low, current price, and change.

Continued on Page 28

NEW YORK STOCK EXCHANGE COMPOSITE PRICES

Main table of New York stock exchange composite prices, listing various stocks with columns for 12-month high/low, current price, and change.

Continued on Page 28

Notes and footnotes regarding stock prices, dividends, and exchange rates.

WORLD STOCK MARKETS

Nasdaq national market 3pm prices

Table of world stock markets including Austria, Germany, Norway, Australia, Japan, and others. Columns include country, date, price, and change.

OVER-THE-COUNTER

Table of over-the-counter stock prices with columns for stock name, price, and change.

LONDON

Table of London stock prices and changes, including a list of companies and their respective price movements.

Table of American stock exchange prices, including Toronto and other regional markets.

AMERICAN STOCK EXCHANGE PRICES

Table of American stock exchange prices with columns for stock name, price, and change.

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NEW YORK PRICES

Table of New York stock prices with columns for stock name, price, and change.

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Table of New York stock prices with columns for stock name, price, and change.

World Economic Indicators every Monday in the Financial Times. World Value of the Dollar every Friday in the Financial Times.

LONDON STOCK EXCHANGE

MARKET REPORT

RECENT ISSUES

Equity leaders drift back after promising start on optimistic CBI survey

Account Dealing Dates

\*First Declared Last Account Dealings Dates...

The most optimistic predictions on UK manufacturing industry for five years were made...

Occasional end-financial year selling aggravated the drift lower in markets conscious of the temptation facing investors to cash in...

The FT Industrial Ordinary share index captured the early firmness with a 10 am gain of 1.6. An hour later this was transformed into a net loss of 3.2...

CU feature again A weekend Press suggestion that Commercial Union was close to finalising the sale of its U.S. interests to American International...

FT-ACTUARIES SHARE INDICES These indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

Table with columns: EQUITY GROUPS & SUB-SECTIONS, Mon April 2 1984, Fri Mar 30, etc.

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Table with columns: FIXED INTEREST, PRICE INDICES, Mon April 2, etc.

FINANCIAL TIMES STOCK INDICES

Table with columns: Government Secs, Fixed Interest, Industrial Ord., etc.

HIGHS AND LOWS S.E. ACTIVITY

Table with columns: Govt. Secs, Fixed Int., Ind. Ord., Hold Wines

Hickson International improved 4 to 397p; the annual results are due on Thursday...

Micro business up Leading Electricals followed the general trading pattern and fell 6 to 265p...

Pilkington lower Occasional selling and lack of support saw the miscellaneous industrial leaders drift a few pence lower...

to week-end Press mention with a rise of 5 to 39p. Others to benefit from comment included Spring Ram, up 8 at 190p...

Paper/Printings were highlighted by Buxell which jumped 23 to 460p in response to the proposed 100 per cent scrip issue...

Irish exploration issues, however, continued their recent dismal performance. Widespread rumours that the offshore oil company...

Gold drift The temporary Argentine debt solution prompted an easier trend in bullion and caused a

widened drift throughout the gold-related sectors of mining markets. South African Golds were marked down at the outset...

South African Financials were similarly depressed - "Amgold" fell 11 to 294 and Gold Fields of South Africa 4 to 215...

Australians made progress in early dealings but this trend was reversed in after-hours trading as bullion and a number of base metals encountered selling pressure.

Secondary issues provided the main features in Properties. Amalgamated Estates slumped to 3p prior to closing a net 3p dividend...

NEW HIGHS AND LOWS FOR 1984 NEW HIGHS (79) Each Sec 1984 Bath 11 4 1984

Table with columns: NEW HIGHS (79), NEW LOWS (15), FRIDAY'S ACTIVE STOCKS

EQUITIES

Table with columns: Stock, 1983/84, 1984/85, etc.

FIXED INTEREST STOCKS

Table with columns: Issue Price, Amount, Stock, etc.

"RIGHTS" OFFERS

Table with columns: Issue Price, Latest Return, Stock, etc.

OPTIONS

Table with columns: First Deal, Last Deal, etc.

RISES AND FALLS YESTERDAY

Table with columns: British Funds, Foreign Bonds, etc.

FT - SE 100 INDEX

Table with columns: Close, High, Low, etc.

LONDON TRADED OPTIONS

Table with columns: Option, Calls, Puts, etc.

MONTHLY AVERAGES OF STOCK INDICES

Table with columns: Financial Times, Industrial Ordinary, FT-SE 100, etc.

EUROPEAN OPTIONS EXCHANGE

Table with columns: Series, Vol., May, Last, etc.



FT LONDON SHARE INFORMATION SERVICE

HOTELS—Continued

Table of hotel share prices including columns for Stock, Price, Div, and Yld.

BRITISH FUNDS

Table of British Funds with columns for Stock, Price, Div, and Yld.

Table of Five to Fifteen Years funds with columns for Stock, Price, Div, and Yld.

Table of Over Fifteen Years funds with columns for Stock, Price, Div, and Yld.

Table of Undated funds with columns for Stock, Price, Div, and Yld.

Table of Index-Linked funds with columns for Stock, Price, Div, and Yld.

Percentage of total investment in preferred securities at 31.10% and 12.5%.

INT. BANKS AND O'SEAS GOVT STERLING ISSUES

Table of international bank and overseas government sterling issues.

CORPORATION LOANS

Table of corporation loans with columns for Stock, Price, Div, and Yld.

COMMONWEALTH AND AFRICAN LOANS

Table of commonwealth and African loans with columns for Stock, Price, Div, and Yld.

LOANS

Table of various loans with columns for Stock, Price, Div, and Yld.

Public Board and Ind.

Table of public board and industrial shares with columns for Stock, Price, Div, and Yld.

BEERS, WINES AND SPIRITS

Table of beer, wine, and spirit shares with columns for Stock, Price, Div, and Yld.

FOREIGN BONDS & RAILS

Table of foreign bonds and rail shares with columns for Stock, Price, Div, and Yld.

AMERICANS

Table of American shares with columns for Stock, Price, Div, and Yld.

CANADIANS

Table of Canadian shares with columns for Stock, Price, Div, and Yld.

BANKS, H.P. AND LEASING

Table of bank, H.P., and leasing shares with columns for Stock, Price, Div, and Yld.

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BUILDING INDUSTRY, TIMBER AND ROADS

Table of building industry, timber, and roads shares with columns for Stock, Price, Div, and Yld.

DRAPERY & STORES—Cont.

Table of drapery and stores shares with columns for Stock, Price, Div, and Yld.

ENGINEERING—Continued

Table of engineering shares with columns for Stock, Price, Div, and Yld.

AMERICANS

Table of American shares with columns for Stock, Price, Div, and Yld.

CANADIANS

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ENGINEERING—Continued

ELECTRICALS

Table of electrical shares with columns for Stock, Price, Div, and Yld.

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LOANS

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AUTHORISED UNIT TRUSTS

Table listing various unit trusts such as Abbey Unit Trust, Abbey Growth, Abbey Income, etc., with columns for name, manager, and other details.

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FT UNIT TRUST INFORMATION SERVICE

Large table listing numerous unit trusts including Abbey, British, and various international funds, with columns for name, manager, and other details.

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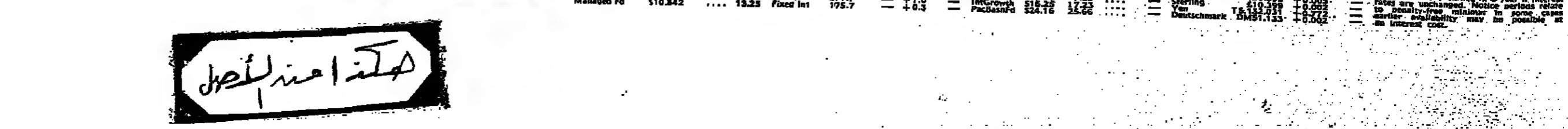
F.T. CROSSWORD PUZZLE No. 5383

- CROSS
1 Sailors of Avon? (4, 5)
2 Seal and cork (5)
3 Information from fabulous monster, in short (5)
4 Rock where brig capsized—place of sacrifice (9)
5 Jazzy sort of dance with Topsy (10)
6 Ecstatic game? (4)
7 Sea-beast fed among locks, perhaps? (7)
8 Material for Welsh and Greek characters? (7)
9 Exit from store 100 with a cry (4, 3)
10 Nothing left in store to betray? (4, 3)
11 Tomboy'sasper (4)
12 Possibly functional conclusion of fight (5, 5)
13 Article on food in net for New England island (9)
14 Nitro maybe inactive (6)
15 Rustic in bondage to the pound (5)
16 Old woman entertains doctor up on boat—no easy task (4, 5)
17 Troubled caused by crashing into a cliff (10)
18 Pznl becomes (with mother on the wagon) a marshal (9)
19 Income from volume coming up—about two-thirds of it Northern (8)
20 Learn on King's ring: that's your opinion? (5, 2)
21 Prize ran to get going (5, 2)
22 Pole in fur in Russia (3)
23 I leave a painter, a superman (5)
DOWN
1 Go up in transport that's fake (5)
2 They are weeded out from the unfinished piece of cricket (9)
3 Foot points out the easy way (4, 6)
4 Kit's sledge incorporating a slinger? (7)
5 Topic dependent on another (7)
6 Insincere elements in drama? (4-5)

Crossword puzzle grid with numbers indicating starting positions for clues.

Table listing insurance companies and their services, including Abbey, British, and various international funds.

Table listing insurance companies and their services, including Abbey, British, and various international funds.





INSURANCE & OVERSEAS MANAGED FUNDS

Handwritten note in Arabic script: "هذا المصنف"

Main table listing various insurance and overseas managed funds, including company names, fund names, and performance metrics.

OFFSHORE AND OVERSEAS

Table listing offshore and overseas managed funds, including company names, fund names, and performance metrics.

NOTES: Additional information and disclaimers regarding the fund data and performance.

COMMODITIES AND AGRICULTURE

EEC beef regime changes alarm British exporters

By Richard Mooney, Commodities Staff

CHANGES in the EEC beef regime agreed by Community farm ministers at the week-end are causing deep concern among British exporters.

A delegation of exporters met Mr Michael Jopling, the British Agriculture Minister, yesterday to seek clarification of the new arrangements, which at first sight appear to close the door on some British beef exports.

While reducing the maximum deficiency payment to UK producers of "clean beef" by 20 per cent, the Ministers are also understood to have agreed that the remaining payment should be "clawed back" if the meat is exported, under an arrangement similar to that operating under the lamb regime.

Clean beef refers to beef not produced as a by-product of dairying and represents around 20 per cent of the country's 180,000 tonnes annual export total.

The exporters claim the clawback would make them uncompetitive and leave the market open to beef from other EEC countries, notably the West Germans and the Irish.

They are particularly concerned at reports that the clawback is to be applied on existing contracts as well as new ones.

"We already have supply contracts for up to six months ahead," said a director of one exporting company. "And we are anxious to complete deals further ahead than that."

"We need to know where we stand," The National Farmers' Union said it was still not clear whether the clawback clause to be applied to exports to other community countries, third countries or both.

But whichever was the case, it would reduce export opportunities and was therefore bad news for farmers.

It could be good news for consumers, however. Mr Vincent Champion, deputy general secretary of the National Federation of Meat Traders, which represents Britain's independent butchers, said the introduction of a clawback should result in more domestic beef being available to British consumers.

The butchers had feared that the deficiency payments would be done away with altogether and replaced by an intervention buying system.

An intervention system would have resulted in a retail price rise of 12p a lb at the very least, he said. The reduction in the deficiency payment will not, in itself, cause prices to rise in the short term.

If the use of intervention is extended to make up producers' lost returns, however, retail prices could be raised by about 3p a lb.

"The premium (deficiency payment) is an alternative to intervention," Mr Champion explained. "It is cheaper and more effective but it can be argued that its use in Britain has led to extra intervention purchases in other member countries."

He said French traders claimed it gave British exporters a 15-20p advantage, equivalent to 20-25 per cent of the wholesale value on the Paris market.

If there is no change in the intervention system the burden of the deficiency payment will fall on beef producers, who would be expected to cut back production in response.

This production cut would tend to raise retail prices in the medium term, Mr Champion said.

A National Farmers' Union official said he understood Mr Jopling had undertaken to consider the case for introducing intervention buying of British beef so as to compensate producers for lost income.

While a lot of detail about the new beef regime had still to be decided, and the operation of the intervention system in Britain fell into that category.

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Commodity values continue to rise

By Our Washington Staff

AVERAGE commodity prices continued their prolonged and gradual upward trend in February 1984, rising 14.8 per cent above the previous year and 19 per cent above their trough in November 1982.

The 0.8 per cent rise in February from the preceding month in the weighted average wholesale price index of 30 primary commodities was paced by large increases in the prices of metals and agricultural raw materials, and a slight rise in food prices.

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Quality tea prices suffer technical fall

By John Edwards

THE INDICATIVE selling price for quality teas was cut sharply from 25p to 23p a kilo at the London weekly auctions yesterday.

However, brokers said the decline was only a technical change as a result of the end of season offerings of top quality North Indian teas.

As a result the average price for all teas is expected to be much the same, or even slightly higher, than last week's figure of 24p.

Meanwhile, hopes that the Indian ban on exports of CTC (crush, tear and crum) teas, imposed in December, may be lifted soon were raised by a statement by Jagdish Khattar, the Indian Tea Board chairman, that it was only a temporary and short-term measure.

St. Joe strike pushes lead to two-year high

By JOHN EDWARDS

LEAD PRICES rose to the highest level for two years on the London Metal Exchange yesterday following confirmation of a strike by St. Joe Minerals' workers at the company's five lead mines in Missouri.

An additional boost to the market was another decline in LME warehouse stocks of lead last week.

Lead stocks have now fallen by 86,000 tonnes from the all-time peak reached last October and there is now a scarcity of immediately available supplies.

Cash lead yesterday rose by \$4 to \$349.5 a tonne moving to a slight premium over the three months price, up by \$3 to \$348.25 after reaching \$355 at one stage.

Zinc prices were also down again by 1,450 to 43,300 tonnes and the cash price premium widened to reflect the worsening shortage of immediately available supplies.

However, the market as a whole was under pressure, from profit-taking selling and uncertainty about whether the present high price levels can be sustained in spite of several more producers lifting their European official price by \$40 to \$1,090 a tonne.

Copper prices were also erratic. The market opened on a strong note, with the higher grade three months price climbing \$1.17 before falling back to close at \$1,067.5 a tonne, still \$9 up on Friday.

There was some disappointment at copper falling by only 4,825 to 319,925 tonnes, since a much bigger decline had been anticipated.

Aluminium was boosted by stocks declining by 1,000 to 189,450 tonnes, whilst tin stocks fell by 815 to 31,380 tonnes.

Only LME silver holdings were up by 70,000 to a record 50,608,000 ounces.

Trading in 20-tonne lots will start next week. February 1985 delivery month at the latest, although the 100-tonne contract may be phased out even earlier.

It is hoped that the much smaller size medium lot will increase liquidity in the market and encourage more speculators to participate.

As part of a general drive to stimulate the present low level of trading activity, it has already been decided to move the market from its existing premises in the Corn Exchange to the Baltic Exchange, near other agricultural futures contracts for grain, potatoes and pigment.

Soyabean meal \$ contract to be scrapped

By Our Commodities Editor

THE London Soyabean Meal Futures Association has decided to scrap the dollar-based contract, introduced last year, and to replace the existing sterling contracts for lots of 100 tonnes with a new contract for lots of 20 tonnes each.

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Congress set to approve acreage reduction Bill

By NANCY DUNNE IN WASHINGTON

THE U.S. Congress is expected to give final approval this week to farm legislation which strengthens this year's wheat acreage reduction programme and makes similar schemes likely in 1985 for feed grains.

American wheat farmers have already entered 500 acres in the land idling programme, promising to leave fallow between 30 and 50 per cent of that land.

The new legislation, which President Reagan is expected to sign, is designed to lure even more into the programme with the promise of cash payments.

Because last year's drought and Payment-in-Kind (PIK) programme reduced stocks, feed grain farmers have been asked to get aside only 10 per cent of their acreage this year.

Maize farmers have agreed to take about 4.4m acres out of production and are expected to plant about 77m acres.

With a bountiful 1984 crop looming, legislators agreed in the new Farm Bill on a paid diversion programme for feed grains next year if, at the end of next September, the Agriculture Department (USDA) estimated 1985 ending stocks at more than 1.1bn bushels.

The Reagan Administration views the new legislation as something of an achievement. It has sought for some time to limit escalating target prices, which determine subsidy levels and rise each year.





# Nonwovens

## THE TEXTILE INDUSTRY'S BIG GROWTH AREA

### The future looks assured

IT IS highly appropriate that the nonwovens industry, which opens its congress and exhibition today, should have chosen Geneva for its venue. The Swiss city is both affluent and internationally minded, attributes possessed by the industry itself.

As much as any other industry, European nonwovens is international. It exists, and has grown, and can only continue to exist because it trades across national borders, far more so than the American industry whose parameters largely end at U.S. borders, or the Japanese one.

It is affluent because it has grown at a faster pace than most other European industries over the past two decades, and certainly much more rapidly than sectors with which it is associated such as textiles and plastics.

In 1970, production in Western Europe amounted to a mere 40,400 tonnes; a decade later the figure had reached 190,000 tonnes and in 1982, the last year for which figures were available, it was estimated to have reached 210,000 tonnes.

In the early years there was an exceedingly rapid rate of growth, averaging 26 per cent a year. This subsequently tailed off, and between 1975 and 1979 the rate was around 14 per cent, with an average nearer 10 per cent in recent years.

This rapid rate of growth was to a large extent due, of course, to the low base point. But, even allowing for this, progress has been little short of startling, especially given the troubles associated with allied industries in this period such as textiles, chemicals, paper and plastics.

The growth has not been completely even. There was a hiccup in late 1974 and 1975 following the oil price rises after the six-day war between

By ANTHONY MORETON

Israel and Egypt in the autumn of 1973 and another one in 1981 following oil price rises in 1979. These interruptions have done little to stem what has seemed like an inevitable growth rise.

The future, too, looks as assured as anything can be. A further rise in production of around 10 per cent is expected this year, according to M Guy Massemaux, secretary general of EDANA, the Brussels-based European Disposables and Nonwovens Association, with another 10 per cent likely in 1985.

It is hardly surprising, given this strength, that the industry is increasingly seeking to be considered on its own merits rather than as an adjunct of something else. For years it was considered part of other industries—hardly surprising given its close links with textiles, paper and plastics. There is now a growing awareness,

however, that nonwovens is an industry in its own right, producing products which are in direct competition with those of these older-established industries.

This is perhaps nowhere more evident than in the field of medical and hospital requisites. A doctor's gown, a bed sheet or a dressing may be made by a conventional woven method or it may be produced along a nonwoven path.

The two are not necessarily the same. The nonwoven product has to be seen, and commercially judged, on its attributes as a disposable product; the woven textile product has to be seen within a recyclable life. It may cost less, initially, than a nonwoven garment that appears similar, but its cost structure is very different.

The initially dearer nonwoven surgeon's gown has a very different cost comparison when the woven equivalent is laundered and repaired over its whole life. It is possible then that the initially "dearer" nonwoven may be cheaper in the long run.

It is around such factors that much of the discussion by buying authorities is now going on. Do they go for initial cheapness ("wovens") or long-term cheapness (nonwovens)?

Another problem the producers of nonwovens have is that of identification. The vast variety of products made from nonwovens, and the large spread of industries covered surprise even those within the industry.

Nonwovens are to be found in items as disparate as tea bags, surgical dressings, ropes, coat linings, sheets, handbags, support for river banks and harbour walls, coffee bags, nappies, and underpinnings for airport runways. Other applications for nonwovens are for washing-up cloths, soot pads, carpet underlays, sanitary protectives, overalls, protective clothing, cable protection, face masks, gauze, leather substitutes, filter

equipment, roofing strip, car upholstery and tyre and engine components, and carpet underlays.

The development of nonwoven production is reflected not just by the number of products but by the number of plants producing them. Between 1970 and 1981 the number in Europe doubled from 39 to 81, with part of the increase being accounted for by new entrants.

#### Main producer

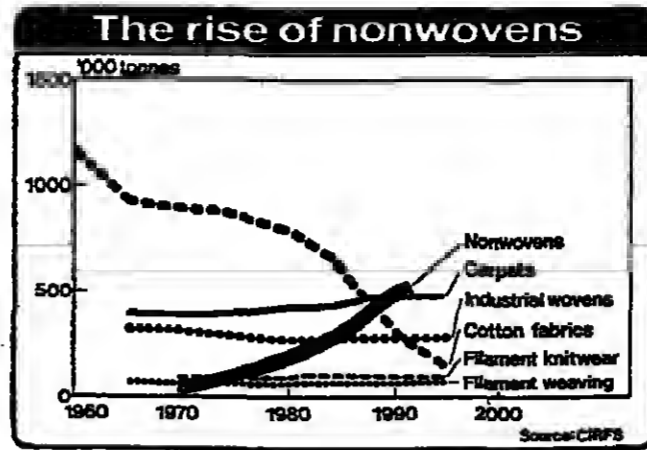
The most important producer has always been Germany, but there is a wide range of production facilities. In 1970 German output was just over a third (38.4 per cent) of the European total though by 1982, as a result of strong investment in other countries this had dropped back to a quarter.

The fastest growth was recorded by the Benelux countries which in 1970 were relatively insignificant producers but which by 1982 had risen to second place. At one point, in 1981, they almost edged Germany out of top spot. British output has become stagnant though Scandinavia, in particular, and France, to a lesser extent, have grown steadily.

As output has grown so, too, have end uses changed. Originally, interlinings for clothes were the most important outlet, accounting for about a quarter of production.

Coverstock is now by far the most important use, with civil engineering and building rising very strongly. Other important sectors are upholstery and carpet underlays (the two are not separated statistically), coating substrates, abrasives and tea bags, and wiping cloths.

Coverstock is the trade term for nappies, adult incontinence pads and feminine hygiene products. Nonwovens have never been so important in coverstock in Europe as they have in the U.S., where Procter and



EUROPEAN PRODUCTION BY COUNTRY (Figures in tonnes)

Country	1970	1975	1978	1981	1982
Germany	14,700	20,500	31,200	45,600	53,200
UK	8,400	22,200	33,500	32,400	34,600
France	7,800	16,900	23,000	27,500	29,200
Benelux	6,000	21,400	37,000	41,100	44,500
Scandinavia	1,900	16,700	18,100	21,400	25,600
Others	1,600	5,600	11,200	22,000	22,900
Total	40,400	97,300	152,100	191,600	210,000

**NONWOVENS: A DEFINITION**

THE difference between a nonwoven fabric and a woven fabric may be summarised as follows:

- In a woven fabric, the fibres are aligned in two directions, perpendicular to each other.
- In a nonwoven fabric, the filaments or fibres are entangled multi-directionally.
- The methods of manufacturing nonwovens eliminate traditional textile processes, such as spinning, weaving or knitting. Instead, these fibrous products are produced by dry laid, wet laid, spun bond and fibrelaid web systems, described in more detail on page 11 of this survey. Shown here is a microscopic view of a thermally-bonded nonwoven fabric.



Gamble is considered to be the market leader, but there have still been enormous increases in recent years.

These increases have arisen from the installation of new plant; indeed, new plant has led to some fears that in this sector signs of overcapacity could be emerging. The overcapacity is not so much due, however, to excess plant as to technical changes. These are taking place with such rapidity that much plant is quickly obsolete.

Further strong growth in the coverstock market in Europe is expected though disposables penetration in this market may never reach U.S. levels. Growth will also come from the supply of products to deal with

### INDEX '84 STARTS TODAY

VISITORS and exhibitors from the U.S., Japan, South America, the Middle East, Eastern and Western Europe will be participating in INDEX '84, the congress and exhibition for the nonwovens industry.

The event, held every three years, opens today at Palexpo, Geneva, with close to 180 international exhibitors—a substantial increase on the previous show. More than 80 speakers are taking part in the congress in which various seminars will review production and marketing developments within sectors of the industry. The congress, which runs from today until Thursday, features sessions in English, French and German.

#### IN THIS SURVEY

- The major producers: a growing trend towards spunbonded products II
- Manufacturing methods: new techniques eliminate traditional textile processes II
- U.S. production: the growth rate even outpaces Europe III
- The fibre manufacturers: fresh optimism as new markets open up III
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- Nonwovens in industry: new products replace traditional materials IV
- Profile: Freudenberg expands operations in U.S. and Japan V
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- Research leads to new applications VI

Interlinings have always been a strong area for nonwovens because of their excellent quality as drapes. But nonwovens have made little headway into clothes production.

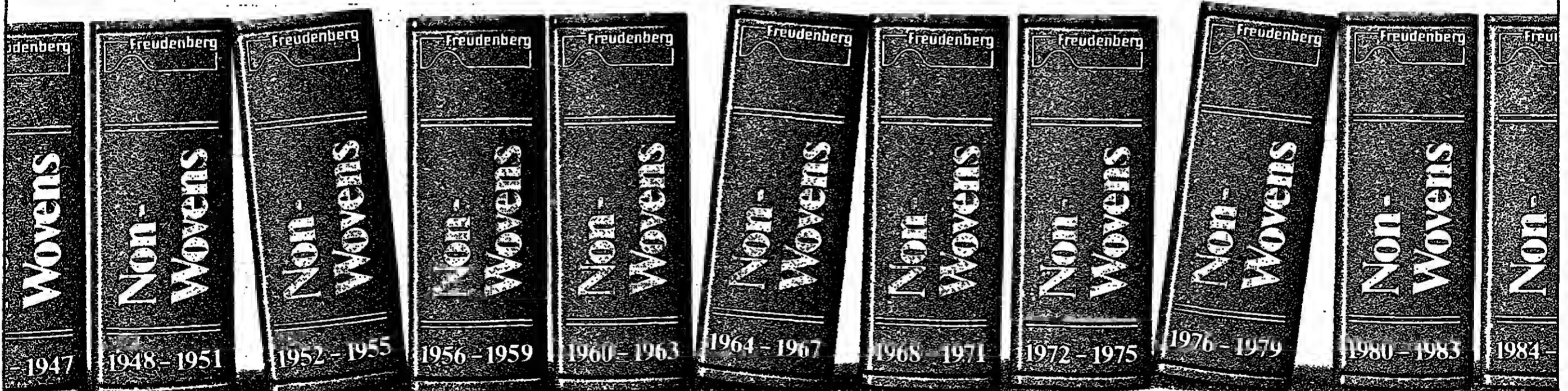
The fastest growing side now is undoubtedly in civil engineering and building where expansion has been very rapid since 1977. This end-use originated in Europe with several of the big producers and the main development still remaining on this side of the Atlantic.

The characteristics which have helped nonwovens to succeed in this area include price, strong tear resistance, tensile strength to match the stress involved, and high

resistance to rotting and ageing. Above-average growth is expected to continue, too, because export markets have opened up handsomely.

The European industry is now looking forward to a growth of at least 8 per cent a year, which might be a conservative estimate.

A switch in consumption of basic raw materials away from cellulose to fibres, which characterised the early days, towards polyester and polypropylene, in particular, has also characterised the industry. It illustrates the degree of change which has taken place in, and continues to take place in, what is now established as a very fast-moving industry.



## Who Is Writing The History Of Nonwovens?

The first chapters were written by Freudenberg. In 1948 we entered the market with the first nonwoven products. Already since 1951 we produce in the USA, and since 1960 in Japan. We developed the spunbond technology and were the first to commercialize the thermobonding technique. Freudenberg employs the broadest spectrum of

manufacturing technology for worldwide application and use. The variety of our product range reaches from long-lasting durable nonwovens to disposable products; from very light to extremely heavy material. From continuous mass-production to individually tailored problem solvers. We develop for our customers with our

customers. We are at home in the fields of fashion, engineering and construction, hygiene, medicine and in household cleaning. The brands Viledon, Vileda, Vileseline, Vlene, Fiselina, Pellon, Lutravil stand for the experience of the most diversified and international manufacturer of nonwovens in the world. With fifteen manufacturing facilities in nine countries.

Freudenberg is the largest "textile corporation" in Germany and the largest manufacturer of nonwoven materials in Europe. Worldwide sales exceeded one billion Deutschmarks for the first time in 1983. Our commitment to writing the nonwovens history for the benefit of our customers and the industry in general continues.

NONWOVENS II

Plenty of innovation among the industry's major producers  
**A growing trend towards spunbonded products**

**THE CINDERELLA** image which has masked the development of the nonwovens industry for more than 20 years is now evaporating, revealing the involvement of some of the world's largest fibre and textile organisations.

At the same time, innovative methods for making nonwovens are tending to push the actual manufacturing stage further upstream closer to fibre extrusion. This is placing some companies in the potentially embarrassing situation of being both suppliers to the nonwovens industry and nonwovens manufacturers themselves. Such companies have so far managed to handle the problem delicately and successfully.

In Europe, of coated materials for automotive interiors and has also developed markets for its Corovin polypropylene and polyester spunbonded nonwovens in a number of other product areas.

**Main areas**

Among the most important are coverstock (for diaper and similar products) quilting for the bedwear and mattress industries, in protective clothing, filtration and agricultural applications.

The company, which has a turnover of £200m altogether and 650 employees spread across all its activities, believes spunbonded will continue to replace other textile materials on the basis of their better price/efficiency ratio.

The company's own estimates put the production of nonwovens in Europe currently at 250,000 tonnes, with spunbonded accounting for 90,000 (divided into 70,000 tonnes over 150 gm per sq metre and 20,000 tonnes under 150 gm per sq m). Whereas spunbonded in general are expected to grow at 12 per cent a year until 1990, Benecke expects the growth rate to be nearly 30 per cent a year until 1990, reflecting their growing penetration into areas such as coverstock.

Another U.S. licensee, Crown Zellerbach Corporation, was a major papermaking operation before adding spunbonding to its activities. This latter company has recently licensed a Swedish company to build a spunbonding plant employing what has developed into the Crown Zellerbach system.

The Swedish company, Halmens Bruk, is acknowledged to be one of the largest European manufacturers of newspaper. It is to invest £12.6m in the spunbonding project, which is scheduled to come on stream early next year.

As a manufacturing technique, spunbonding appears to attract papermaking organisations, perhaps because of its potential for fast and large scale output of fairly standard qualities. Sodoca, another Lurgi licensee, was originally set up in France by the Swiss-based Holzstoff group.

Although Sodoca first made strong marketing efforts in the geotextile markets, more recently the company has diversified into making spunbonded for use as carriers in simulated

leathers, for various bedding and mattresses, agricultural protective clothing and special industrial applications.

Du Pont's production of three different generic types of spunbonded plus spunlaced materials (the latter consist of a fibre web held together entirely by inter-fibre friction, the fibres having been arranged to produce this friction—and to create a variety of inherent pattern effects—by a highly sophisticated water-jet technique) makes the company the biggest nonwovens manufacturer in the world in volume terms.

Most spunbonded manufacturers concentrate on making only one generic type, usually polypropylene or polyester.

Another outstanding exception, however, is Lutravil Spinnverles West Germany, which makes both these two and others based on nylon.

**Diverse group**

Lutravil is the spunbonding subsidiary of Carl Freudenberg group, arguably the most diverse and cosmopolitan nonwovens organisation in the world. Freudenberg has extensive manufacturing facilities through fully-owned, majority-owned and minority-held operations in Western Europe, North America and the Far East. The organisation is involved in manufacturing virtually every type of nonwoven.

In the UK, Bondina—one of the largest domestic nonwovens manufacturers (making nonwovens for applications as varied as advanced interlinings, battery separators, medical items, filtration and electrical insulation)—is a Freudenberg subsidiary.

Total turnover in 1983 of the still privately-owned Carl Freudenberg company was £194.8m. This figure takes into account all fully-owned operations, and those in which the company has a share of more than 50 per cent; it can be added a further £100.6m from other operations in which Freudenberg has a minority interest.

Another major UK nonwovens manufacturer is Bonded Fibre Fabric. This company, too, markets a range of constructions equally varied as that of Bondina. BFF is an associate of Courtauld's Group but represents only one nonwovens manufacturing customer for the fibre producer's viscose items.

By DEREK WARD

of 11,400 tonnes, is also represented in roofing carpet underlay, the car and footwear industries.

In footwear, Ita Bidim nonwovens brand is sold to manufacturers who process the material, generally by impregnating it before resoling it in a form which can be used by footwear manufacturers. The material has begun to replace teased cotton fabrics and other cellulostics in toepuffs and stiffeners and in insoles.

Geotextiles markets in particular demand comparatively large quantities of fairly standard fabrics—a demand suiting the large output but limited versatility of most spunbonding systems.

Since the start of this decade, spunbonded have increased their share of total Western European nonwovens output from 5 per cent to over 30 per cent.

Spunbonding as a technique for making nonwovens has not been entirely confined to fibre producers. The Lurgi group in West Germany developed a simple, yet still capital intensive method, the Doman process, and has granted seven licences over the past decade.

Some licensees, such as Kimberly-Clark, in the U.S., were already involved in the more conventional nonwovens sector. Others were entering the nonwovens sector for the first time. J. H. Benecke, West Germany, for example, was possibly the first licensee. The company installed its spunbonding line initially as an in-house source of carriers for its pre-pressed duct ranges, then discovered a wide market potential beyond the company's own needs.

The company—founded over 260 years ago by the Benecke family which still controls it—claims to be the biggest supplier

**PRODUCTION PROCESSES**

Process	1970		1975		1978		1981	
	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Drylaid	32,500	83	61,300	63	84,100	55.3	105,200	55.1
Wetlaid	4,900	12	14,900	15.3	24,400	16.0	28,000	14.7
Spunlaid	2,000	5	21,100	21.7	43,600	28.7	57,800	30.2
Total	40,400	100	97,300	100	152,100	100	191,000	100

Source: EDANA

**EUROPEAN PRODUCTION (tonnes)**

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983 est.
	63,300	84,000	100,700	97,300	114,700	132,600	152,100	176,100	185,600	191,000	210,000	230,000

Source: EDANA

Production techniques eliminate traditional textile processes  
**New manufacturing methods**

NONWOVENS are characterised by the presence of a fibrous structure, consolidated into materials of the required strength and other properties. Their methods of manufacture eliminate traditional textile processes, such as spinning and weaving or knitting.

The fibrous element of these products provides the general classification of nonwovens and their methods of production into dry laid, wet laid, spun bond and fibrillated web systems.

**WEB FORMATION**

• **Dry laid**, in which fibres are arranged into directionally oriented or randomised webs or combinations of both, by carding or related processes.

• **Wet laid**, in which the fibrous element of wet laid nonwovens is produced by dispersion of the fibres in water and deposited as a web.

• **Spun bond**, in which fibre-forming polymers are extruded through spinnerettes and the continuous filaments formed arranged as a fibrous web.

• **Fibrillated nonwovens**, in which extruded thermoplastic polymer films is biaxially stretched, causing fibrillation and the formation of a web-like structure.

The bulk of both dry-laid and wet-laid production is in the lower weight range, such as wipes and coverstock, while spun-laid fabrics are concentrated in higher weight categories, most notably geotextiles. This is, however, changing and figures for spun-laid fabrics below 25 gm/sq. m. indicate a growing penetration of spun-

laid nonwovens in the coverstock sector.

**BONDING**

Many methods are employed to bond the webs formed into products of the required physical properties. These bonding processes may include the use of adhesives, solvents, heat, fibre entanglement, compression or combinations of all of them.

• **Adhesive and solvent bonds:** Webs may be bonded by adhesives or fibre solvents. The application may be by total saturation or in discrete areas or by spraying, providing products of a wide range of weights, density, loft, strength and softness.

• **Thermal bonding:** Webs containing thermoplastic fibres may be bonded by heat to produce voluminous products. Use of heat and pressure applied overall, or in discrete areas, provides more compact materials of varying degrees of firmness.

• **Mechanical bonding:** Webs may be consolidated by mechanical entanglement of their fibrous component by needle punching, stitching with-out thread and other methods.

**FINISHING & CONVERSION**

Nonwovens may be converted by finishing processes for aesthetic or utilitarian purposes. Such processes include decorative printing, treatments to improve chemical and physical properties, flame retardance, absorption and water repellence. Nonwovens may be coated or laminated to other

products for a variety of end uses.

• **Bright idea**

According to Mr. Ken Floyd, of the Shirley Institute in Manchester, nonwoven techniques got off to an unwise start through the use of cheap processes associated with adhesive bonding.

This was developed in the U.S. during the 1940s to use waste cotton fibres which was too short in staple length to enable it to be spun into yarn by conventional means.

"Someone had the bright idea that it should be possible to stick these fibres together to form some sort of fabric."

Unfortunately, the only adhesives which were considered suitable for such a low-grade product were water soluble. Consequently, these first examples of adhesive-bonded fabrics, although passable when dry, literally fell apart when wet.

"It was not surprising, therefore, that the whole family of nonwoven fabrics came to be regarded by industry and the general public as a cheap, wartime substitute."

Since then, according to Mr. Floyd, it has been possible to see three phases—the produc-

tion of cheap, usually inferior substitutes, selling mainly on their low cost, few of which remain today; the production of more sophisticated products capable of selling on their own merits in direct competition with traditional products; and the production of engineered structures designed to meet specific requirements which cannot be made in any other way, such as filter materials for air-conditioning plants.

The process of producing nonwoven products began with needle punching, originally, according to Mr. Floyd, called needle felting. Reciprocating barbed needles are used to produce mechanical interlocking of fibres in a fleece to provide sufficient cohesion.

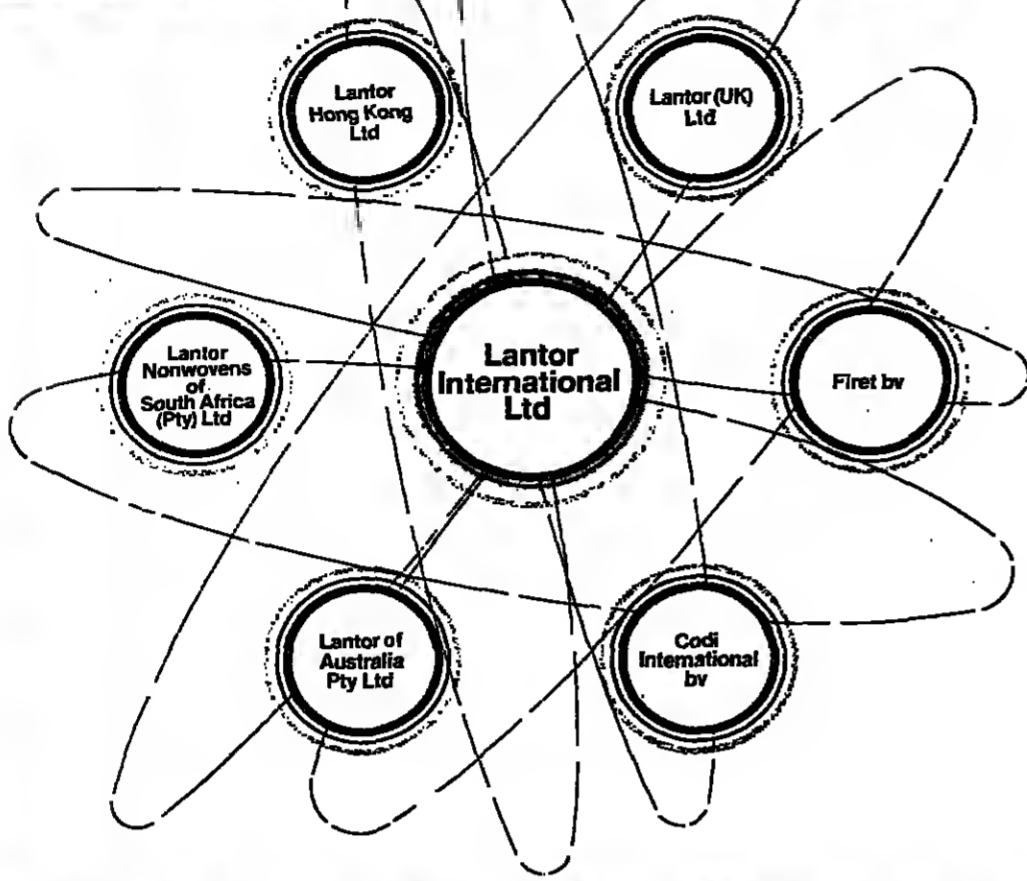
This was followed by adhesive bonding and then by stitch bonding, a process developed almost recently in Czechoslovakia and East Germany during the late 1950s. Under it, a fibrous fleece is consolidated by knitting through the fleece, using a modified form of warp-knitting machine.

The next commercial step forward was spun bonding, by which polymer chips are fed into one end of a production line and a fabric emerges, and then wet-laid nonwovens came along and then spun-laced fabrics developed by Du Pont.

By this latter process high-velocity fluid jets are used to produce both apertures and mechanical interlocking of the fibres, which combine to give soft fabrics with good hanging qualities.

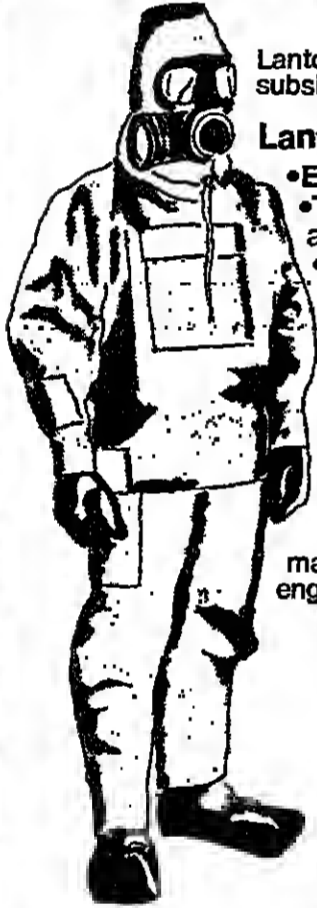
Anthony Moreton

**LANTOR**  
**Leaders in Nonwovens**



**Lantor International Limited - Manufacturers of Nonwovens for a Universe of Applications**

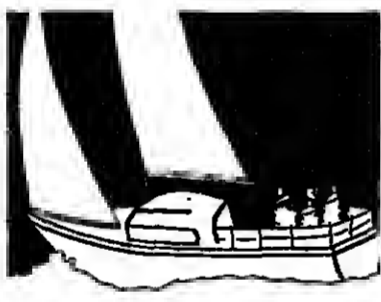
Formed in 1957 by Tootal Group plc and West Point Peppercell Inc. (USA) Lantor have become international leaders in nonwovens with overseas subsidiaries and licensees.



**Lantor's success in nonwovens is built on**

- **EXPERTISE**—Acquired through heavy R & D investments.
- **TECHNOLOGY**—A broad spectrum of product type and advanced manufacturing technology.
- **MARKETING**—Active participation in growth markets such as hospital and surgical, military, consumer and a wide variety of industrial outlets.
- **QUALITY**—The Ministry of Defence has authorised Lantor to carry out its own inspection to Ministry Standards. The required high level of quality is followed through to all commercial products.

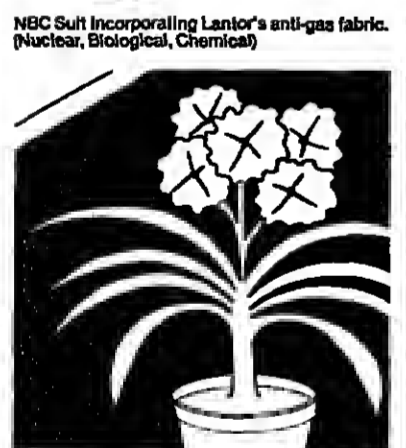
Nonwovens are already of great value to a wide variety of industries and their use is growing rapidly in new sectors. Consequently nonwovens deserve the attention of research managers, product developers, material specialists, architects, engineers and designers as well as purchasing officers.



First Coramat®, the nonwoven core material in polyester constructions for yachts, buildings and vehicles.



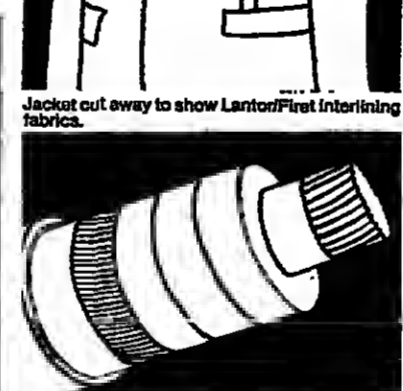
Jacket cut away to show Lantor Firet interlining fabric.



Capillary matting made from Lantor's fabric designed for high water retention.



Hospital wipes manufactured out and packed by Lantor from Lantor's cotton fabric.



Firet® tapes for low, medium high voltage cables, optical and flexible cables.

Lantor's international staff will welcome anyone who would like to know more about nonwovens. Information and documentation are available on request from the following addresses:

- Lantor International Ltd**  
 St. Helens Road, Bolton, Lancs. BL3 3PR. Tel: 0204 61426  
 Telex: 635160 Managing Director J. Bourne
- Lantor (UK) Ltd**  
 St. Helens Road, Bolton, Lancs. BL3 3PR. Tel: 0204 61426  
 Telex: 635160 Managing Director E. Wilson
- Firet bv**  
 Postbus 45, 3900AA Veenendaal, Holland  
 Tel: 06385-19148 Telex: 37119 or at Stand 1181 INDEX 84  
 Managing Director P. de Fouw
- Codi International bv**  
 Turbinestraat 19, P.O. Box 417, 3900 AK Veenendaal, Holland  
 Tel: 06385-13251 Telex: 37111 or at Stand 1183 INDEX 84  
 Managing Director G. van Manen
- Lantor of Australia Pty Ltd**  
 P.O. Box 79, Tullamarine, Victoria 3043. Tel: 3388911  
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- Lantor Nonwovens of South Africa (Pty) Ltd**  
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## NONWOVENS III

### U.S. PRODUCTION GROWTH OUTPACES EUROPE

U.S. PRODUCTION of nonwovens has been growing at an even faster pace than in Europe. Department of Commerce statistics show the manufacturers' shipments rose by some 41 per cent between 1978 and 1982 to reach \$2.4bn.

By comparison, it has been estimated that Western European output, with the exception of Spain and Portugal, was \$750m in 1982, the last year for which figures are available.

The U.S. is largely self-sufficient in its needs. There is a relatively small export trade, at \$146m but imports account for an even smaller \$61m, less than 3 per cent of consumption.

There are probably more than 200 companies producing

non-wovens against some 35 in Europe and these are concentrated in four main areas, California, New York, North Carolina and Pennsylvania.

It has been estimated that employment is now running at about 29,000, a rise of around 16 per cent since 1978. A report prepared for the U.S. International Trade Commission suggests that much of the increase has been in bonded fabric production.

These are usually produced in large plants with a minimum of 100 workers whereas most webs, waddings and battings are turned out by plants which employ 20 or fewer workers. The report indicates that bonded fabric output is dominated by fewer than 25 concerns.

U.S. output has been stimu-

lated by the cheap energy policies pursued by successive administrations and this has given the industry an enormous edge over its European and Japanese competitors whose rates of growth has been affected by oil price rises in the 1970s.

There was a slight blip in 1980, when shipments went up by just \$60m, but the strong growth was quickly resumed and in 1981 it rose by \$266m and another \$180m in 1982.

Exports, as the table shows, experienced a very severe hiccup in 1982, dropping back 14 per cent. It is felt in Washington that increasing prices and weaker markets overseas were responsible for the drop. The most important markets were Japan, Canada, Belgium, the UK and West Germany.

Imports have been relatively stable over the years 1978-82 with indications that the U.S. has been substituting home production at the cheaper end of the scale for overseas goods.

There are indications, though, that the U.S. is taking increasing amounts of the higher-value non-wovens, especially from Japan, Taiwan and Holland. These were going in particular to hospital and other medical uses, where disposables appeared to be making ground as the expense of other products.

Japan's link with the U.S. appear to be strengthening and it is felt there could be a further rise in trade between the two countries.

Anthony Moreton

### New markets open up for European producers

## Optimism among fibre groups

Nonwovens are by far the biggest story in textiles today, both in Europe and the U.S., and for that reason are attracting very considerable interest from the world's big fibre producers.

By the early 1990s the sector, which only 15 years ago accounted for less than 50,000 tonnes of fibre a year in Europe, will have climbed to more than 500,000 tonnes, overtaking the carpet industry, industrial wovens, cotton fabrics, filament knitwear, and weaving as a fibre customer.

Accordingly, all of Europe's big fibre groups—Hoechst, ICI Fibres, Courtaulds, Rhone-Poulenc, Montedison, as well as other smaller producers, and American-owned suppliers such as Du Pont, are trying to develop and market high performance, premium-priced, products aimed at the sector.

The potential for the product is literally enormous and it is taking the fibre producers and their customers into areas—such as medical textiles, and geotextiles—which are far removed from the import-dominated apparel area, and, at this stage, too specialist to attract significant developing country interest.

Nonwovens are developing completely new markets for textile type products—geotextiles again—and winning markets from established products—substrates for industrial coating, for example—because they represent the closest approach yet to the fibre makers' dream—a more or less direct route from fibre to fabric with a minimum of intermediary processing.

### Machinery

Heavy cost in textile production is incurred at the point where machinery weaves or knits yarns into fabric, and this is the reason why production has shifted to developing countries. In nonwoven manufacturing—whichever of three main processes is used—fibre is, generally speaking, merely tangled together to form a mat which is then turned into a fabric, either by the addition of acrylic, styrene, butadiene or other binders, or by thermosetting.

The machinery for doing this is becoming increasingly sophisticated, and the numbers employed to operate it can be minimal. Moreover, the process can be very fast, making it possible to produce in comparatively short times, hundreds of yards of material for use, for example, as a stabiliser on lengthy road projects.

Perhaps surprisingly, given the industry's apparent dynamism, it is good, old-fashioned viscose (rayon) which remains the most widely used nonwoven fibre, accounting for around one-third of European

By RHYS DAVID

consumption in 1981 and somewhat less in 1982.

Rayon's share is the result of the dominant position it built up in a number of fast-growing markets such as disposable diapers and other personal hygiene products, and in wipes, but in the first of these categories it has found itself under increasing attack over recent years from its old enemy, polyester.

While rayon consumption has grown from only 47,600 tonnes in 1975 (when it represented 55 per cent of total fibre consumption) to 57,100 tonnes in 1981 (falling back to 55,600 in 1982), polyester has forged ahead from 14,700 tonnes in 1975 to 45,300 tonnes in 1981.

The principal reason for this is the broad polyester has been able to make in the coverstock market—the technical term for the outer covering of disposable diapers and similar products. The market leader, Procter and Gamble, switched into polyester in the U.S. in the late 1970s with the result that viscose lost its dominant share of a 50,000 tonnes per year market, and now holds only an estimated 10-15 per cent.

In Europe, where the market is about the same size, the transition has not been so complete, but viscose is still down to only a half share.

It is a market where the ultimate customer—the baby—has only limited means of expressing his preferences, but the rayon men are, nevertheless,

### NONWOVEN INDUSTRY—FIBRE CONSUMPTION

	1975	1978	1981	
	tons	%	tons	%
Rayon	47,600	55	57,100	32.1
Polyester	14,700	17	45,300	26.2
Polypropylene			27,000	15.8
Polyamide	18,200	21	9,400	5.3
Others in m. fibres			4,200	2.6
Natural fibres	6,100	7	14,300	8.1
Others			700	0.4
TOTAL	86,600	100	176,600	100

Source: EDANA

less, not dependent, and believe the pendulum will one day swing back their way.

"Polyester coverstock is being sold on the basis of its stay-dry qualities. Everyone focuses on the properties of the diaper after the baby has wet it. It is just as important to think about the period before, when rayon next to the skin is likely to be much more soft and comfortable," one of the rayon producers points out.

While rayon may have to wait for its turn to come back again, it does have other strong new markets developing, which in the view of Courtaulds, one of the world's big producers of the product, will result in total tonnage used remaining stable, even if overall market share declines as overall nonwoven output grows.

### U.S. market

In the U.S. there is a market estimated at between 5,000-10,000 tonnes a year in tumble drier fabric softeners such as P and G's Bounce. These are nonwovens impregnated with softener which are put in with washing into tumble driers. An allied product, a whitening agent again carried on a nonwoven, which is placed with washing into the machine is also being launched in the U.S. In both cases the nonwoven is rayon.

Another application for rayon with enormous potential could hardly be more different—floppy disk wipes. If even minute particles are carried on to the disk by the head, information can be dislodged, affecting performance. As a result in the U.S. the disk now incorporate 80/20 rayon/polypropylene nonwoven twines which sweep the disk to ensure any debris is swiftly removed.

In wipes generally, for hygiene or domestic use, rayon and paper are the main materials used, depending on the strength required and are unlikely to be challenged by the man-made fibres which lack absorbent properties. Other outlets for rayon nonwovens in-

clude curtains and mattress tickings.

For the synthetic fibres such as polyester and polypropylene, and to a lesser extent polyamide (nylon) the market starts at the lighter end where the competition is with viscose and extends up to the very heaviest applications in geotextiles—until recently easily the most important nonwovens outlet for synthetics.

The synthetics, however, have been conducting their own internal battle as well as seeking to drive rayon out of coverstock, and this internal feud is now beginning to reach its climax.

The first synthetic nonwovens to enter the coverstock market were resin-bonded polyesters, but these are themselves under challenge from thermoset polypropylene or polyester fibres. To a large extent this reflects the decision by Procter & Gamble to move to thermoset nonwovens, a move that has made its competitors rethink their own fibre choice.

The advantages of the thermal bonding process is that the product, because it eliminates binders, is simpler and more economical to produce, and more energy efficient. Fabrics produced by this route can also be finer and yet possess better strength and abrasion resistance. ICI is confident that 40 per cent of coverstock will within the next few years be manufactured from drylaid, thermal-bonded fibre, and that the market will also make substantial gains in other nonwoven areas. Others believe products using binders will maintain a significant share of the market.

What is less clear at present is the share which the two competing fibres, polypropylene and polyester, will carve out for themselves. Polypropylene has been given a flying start by the decision of Procter & Gamble to stipulate it, and its main suppliers have been gearing up to produce nonwovens in the material. Its main advantage is its superior hydrophobic properties—in the trade known as its "strike-through" and "re-wet".

Most of Europe's big fibre groups, including Hoechst, Enka and Rhone-Poulenc, have responded with specially engineered, partially oriented polyester binder fibres which soften to form a web under heat, but there remain some technical problems to be solved. In the U.S. similar specialist polyesters have been developed by Du Pont, Eastman Kodak, and Celanese.

ICI is going a different route (as too are the Japanese groups, Chisso and Unichem). It is offering heterodid polyester fibres combining a sheath and core which it claims have a number of definite advantages. Principally there is a softening differential of 40 deg. Cent. between sheath and core which means that the bonding process can take place without affecting the strength of the core.

### Qualities

The product, because of its special properties, is more expensive than the rival thermoplastics and is not quite as hydrophobic as polypropylene. It has the advantage, however, of being able to produce a particularly soft non woven, and will be marketed by ICI as a premium product. The UK group will be presenting its range at INDEX 84 this week.

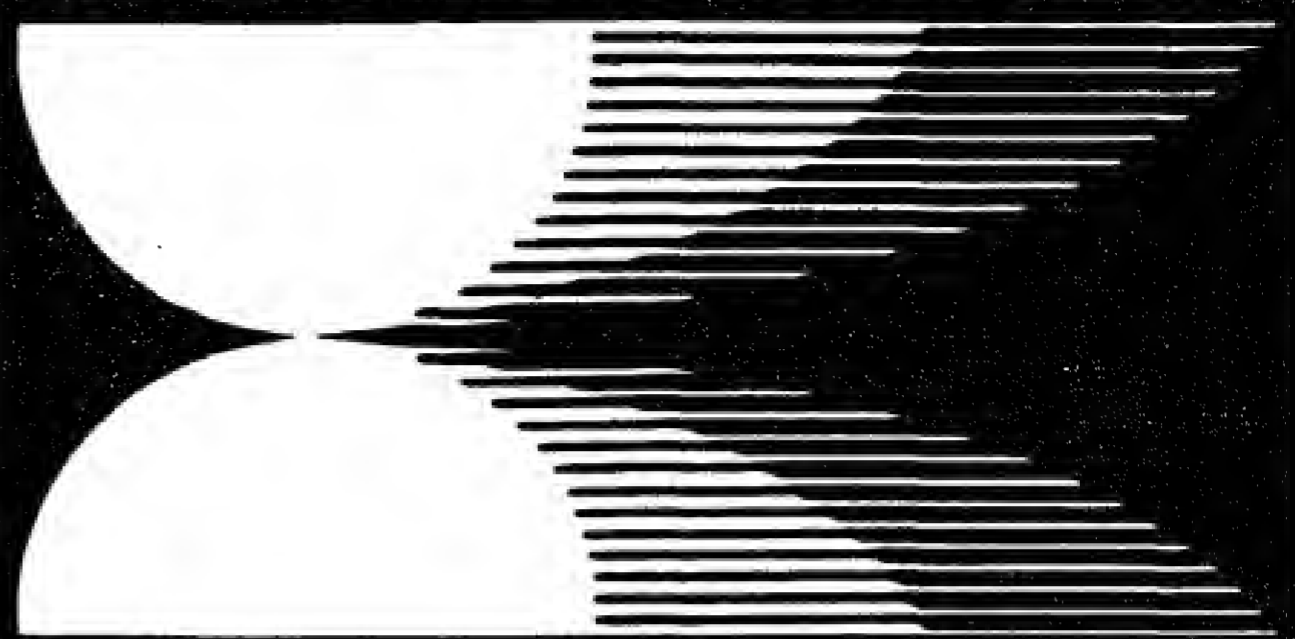
Other heterodid products by ICI are already widely used in nonwovens for filtration, and in interlinings and shoe linings. In these last two applications polyamide rather than polyester is the main fibre in use. ICI also sees strong growth possibilities for thermally bonded polyester heterodid fabrics in hospital products where polyester has the edge over polypropylene because of its superior ability to withstand sterilisation treatment.

The main area still untouched by nonwovens except for certain specialised products is durable apparel, but the big synthetic fibre groups have that in their sights, as a long term goal.

For the present they are happy enough to have found, after 10 years of retrenchment, an area of growth so that the process of developing new products for expanding markets can start again.

Michael Wiltshire

# Index 84



International Congress & Trade Fair for the nonwovens and disposables industries

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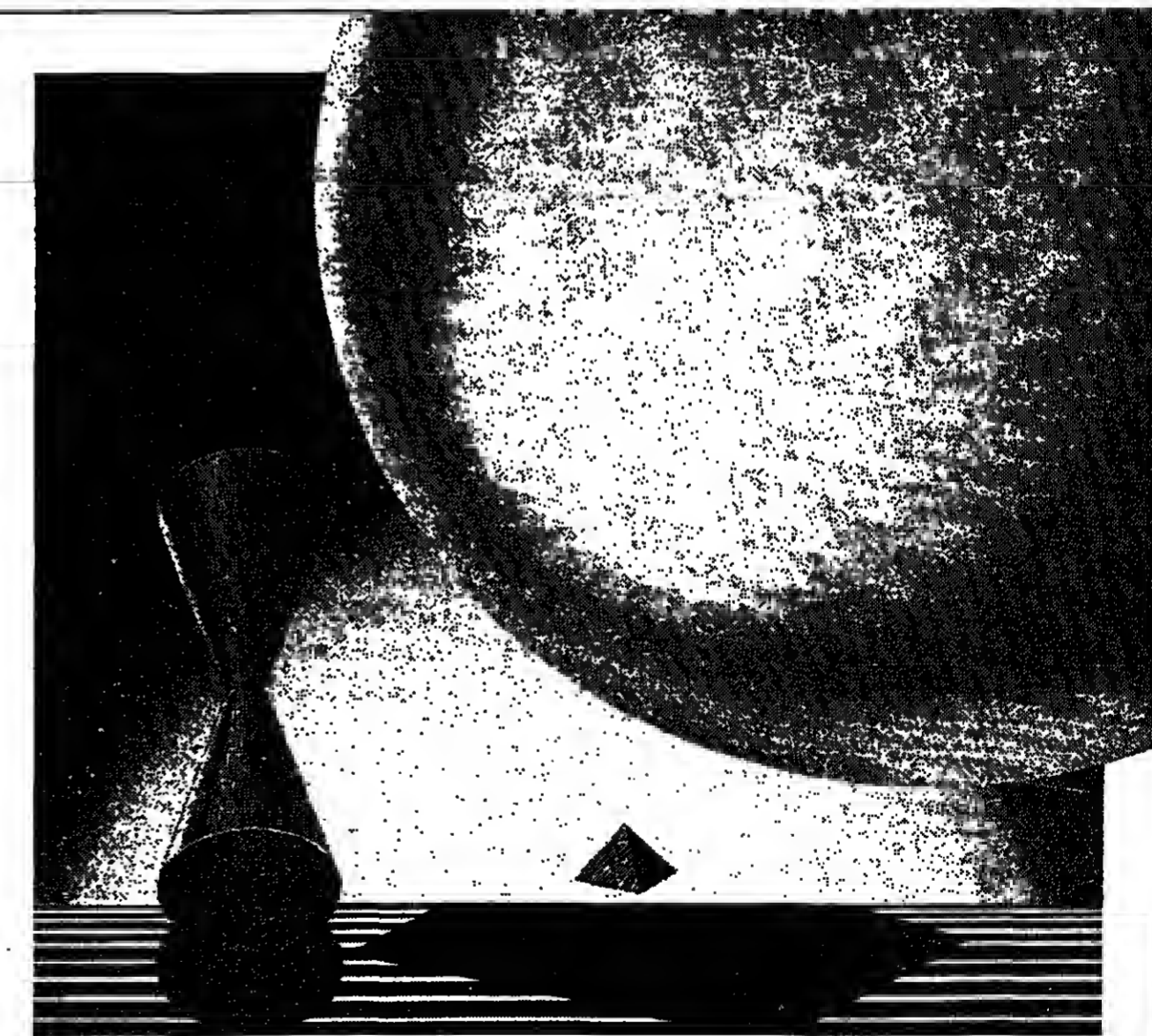
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Manufacturers of strong envelopes made of nonwovens are fond of using dramatic demonstrations to highlight the tear-resistance and tensile strength of the materials used in their products.

For example, Emerson Envelopes of London demonstrated these remarkable qualities by pulling a double-deck bus, along a double-deck bus, using only a 30 ft strip of Tyvek spunbonded olefin, manufactured by Du Pont.

"Even rain didn't impede the experiment," explained Mr Martin Young, an Emerson manager, "because the physical properties of the

spun-bonded strip of very fine polyethylene fibres are practically unaffected by water, which is easily shed from the surface of the envelope.

### Contrast

In a demonstration for another company, a West German salesman found a novel way of impressing potential buyers of nonwoven envelopes.

He took clients to the second floor of his hotel and put a telephone inside a conventional padded paper envelope, and another telephone inside a padded non-woven

envelope. Then he threw both packages out of the window, (first ensuring that no-one was underneath). The paper package split—but the nonwoven one remained intact. The buyers were impressed.

The qualities of these envelopes which are made in all shapes and sizes are proving useful for a diverse range of applications—for example, high couture clothes are sent from Paris to Japan in large, tear-resistant envelopes. Another application is in mail packages for despatch to oil rigs in the North Sea.

Michael Wiltshire

IV



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TO: Brian Searle, London DATE: 2nd April 1984

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P.T.O.



Though their arguments would certainly be challenged by the nonwovens industry (by virtue of cotton producers, nonwoven manufacturers argue that the shift of cotton textile manufacture to the Third World, where most of the cotton crop is grown, has introduced political and economic uncertainties into the supply situation and will tend, over the long term, to lead to a greater use of nonwovens produced in the developed countries.)

The qualities needed in these various products can be engineered in (without losing the cost advantages possessed by) the nonwoven by virtue of the relative simplicity of the manufacturing techniques involved. Thus, a product can be made to absorb very quickly across the whole of its surface where it is being used as a wipe, or it can attract moisture from its surface instantly, to be absorbed by a pad, where it is being used as a cover.

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NONWOVENS IV

The needs of very young children offer a market in which there is intense competition

Multinational hardsell aimed at mothers

FOR ONE explanation of the five-fold growth in production of nonwovens across Europe since 1970, to the present consumption of more than 200,000 tonnes a year, it is necessary to look no further than the pages of women's magazines, particularly those aimed at mothers of very young children.

Each week within their covers these magazines have become the battleground where rival health-care groups, some of them very large multinationals, promote their various brands of disposable diaper.

By RHYS DAVID

In effect, a battle within a battle is going on. The switch to disposables started later in Europe, than in the U.S. where terry towelling has lost most of its market share, and there remains a large potential European market to be tapped.

Trying to win a share of this market are a number of indigenous groups in each of the different national markets on the one side, and on the other, big American groups, most notably Procter & Gamble which, on some estimates, has 25 per cent of the world disposable diaper market, through brands such as Pampers.

Each of these diapers consists of an absorbent interior covered by a nonwoven outer casing, specifically designed to allow moisture to pass one way only, and it is the market offered by the growth of this product which has played a major part in stimulating the large scale investment which has taken place in nonwoven production in recent years.

At the same time, the technology needed to promote a product which will perform well in such a demanding application has been out to good effect elsewhere. The problems of adult incontinence, likely to grow as the population structure of Europe ages—is now being tackled with the aid of non-woven products.

Nonwovens have also been taking over in Europe—as in the U.S.—from traditional cotton-based products in medical and surgical applications. The product is being employed for surgeons' gowns, masks, drapes and tray covers and is beginning to be used as a replacement for cotton gauze.

Shift

Apart from the established textile and paper companies which have sought to carve out a share of the market, other smaller groups have also been encouraged to try their hand by the ready availability of equipment, mainly German manufacture, to compare with the cost of installing a new paper line—perhaps £25m—entry into non-wovens comes cheap, at perhaps no more than £5m.

Machinery is, in fact, available nowadays off the shelf, making it possible for companies with no previous background in textiles or paper to become producers, a far cry from the early days of the industry when machinery development was the non-woven manufacturer himself, drawing on expertise from his core activity, to achieve the manufacturing performance he wanted.

As a result of all these factors there are now no fewer than 80 European manufacturers serving the market, concentrated in Germany, Britain, the

Netherlands, Belgium and France—and in the opinion of some observers, there is significant overcapacity.

According to Mr William Duncan, director of marketing for Europe of Kendall, in diaper-related products there is 30 per cent too much capacity. "Consumption is set to rise by six per cent a year, yet we have 12-15 per cent new capacity being put in. Something has to give," he says.

In part, the overcapacity is due to the enormous increases in the productive capacity of the machinery now available. In the late 1970s a coverstock line was likely to produce 50m sq metres a year, but today's machines—which have had a crippling effect on the economics of older machines—can run out 150m-200m sq metres a year. As a consequence, coverstock is becoming a buyers' market with prices falling by 25 per cent over the past six months.

How the market in light-weight nonwovens will shake out in Europe is now the key question, and the main topic of interest within the industry generally. In the U.S., where there are very large numbers of nonwoven companies, a dominant share of the market is held by a relatively small number and a similar process could follow in Europe. Already in Europe the number of suppliers all or most of the main end-uses is confined to about 15 companies.

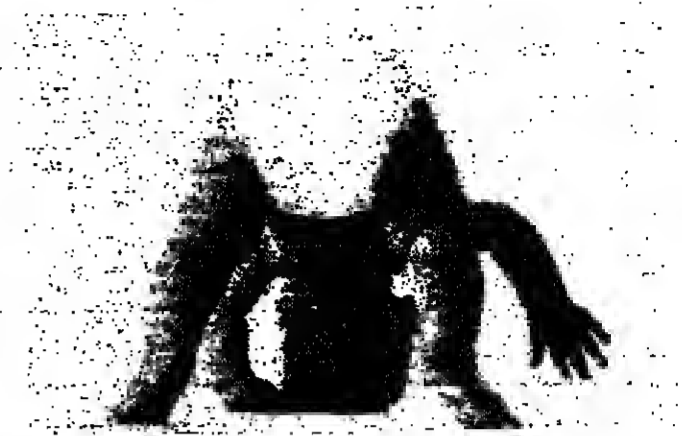
The pattern that emerges is likely to be varied. There is likely to be a number of casualties, especially among some of the new entrants fighting to win a market share on prices alone, and elimination of older unprofitable lines. Other companies, including some of the larger groups, are likely to take shelter from competition in commodity areas by concentrating increasingly on high added-value areas such as medical/surgical uses.

The marketing effort which will be put behind these products could see a major acceleration in Europe away from reasonable disposable hospital theatre and other equipment and a big increase in nonwoven usage in surgical operations. Kendall, Molnlycke Chicopee (part of Johnson & Johnson) and Du Pont (whose interests in nonwovens extend from geotextiles to surgical masks) are all devoting more attention to this sector.

Big share

Chicopee is no longer supplying coverstock to P & G in Europe, though it is still an important supplier to its U.S. factories. The company, which enjoyed a large share with Kendall of P & G's European business when the American soap giant started making its disposables in Europe, has concentrated its nonwoven production in the Netherlands. A factory in Postypool, in Wales, has been closed.

The big groups which are fully committed to nonwovens also hope to pull away from their smaller rivals by making full use of their technological and financial muscle, and through the close links they are able to establish with the big users of nonwovens. In the case of disposable



Coverstock items — which include disposable diapers — are among the best-established product areas for U.S. and European nonwovens manufacturers. They represent a high-volume, low-margin business

Coverstock market moves into new areas

AMONG THE young, expanding markets for nonwovens, coverstock is already a "grand-dad" product. Scores of manufacturers in the U.S. and Europe pitched into coverstock over the last 10-15 years with the result that making and selling coverstock is now a mature, high-volume, low-margin business.

Coverstock is the thick, absorbent nonwoven material used in disposable diapers, feminine hygiene products and pads for incontinent adults. After rapid growth in the first area, manufacturers still in the coverstock business are now eyeing the second two areas as offering the best prospects for growth.

Feminine hygiene products are a \$1bn market in the U.S.; sales in the UK are around \$110m at the retail level. Companies who market sanitary napkins spend heavily on advertising, making claims which have a direct bearing on the coverstock manufacturer. The precise character of the covering material on a sanitary napkin will have a big influence on the woman's perception of the product and her ultimate acceptance of it, according to manufacturers.

"This may be the most important thing we have to consider," said an executive with one of the major coverstock producers. "In the U.S., manufacturers are carefully monitoring the entrance of Procter and Gamble into the field with a new product called Always—'feminine clever'—was how one competitor described the product, as its coverstock has tiny funnels across its surface which draw the fluid into the pad through a capillary action and show almost no staining on the surface."

The disposable nappy market is much more straightforward, by comparison. Simple performance, as opposed to perceived performance, is the most important factor. The same is true for products aimed at incontinent adults.

Carla Rapoport

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Today's nonwovens are replacing traditional materials  
New applications in industry

NEW INDUSTRIAL uses for nonwovens are limited only by the imagination of the companies who dream them up. And dreaming has become big business for nonwoven producers who realise that high margins and fast-growing sales are the rewards for those who can be first with an innovative and useful new product.

Most companies are reluctant to discuss projects in the pipeline because competition is so fierce in new product development. Nonetheless, a number of new areas have been opening up in the last few years and these well illustrate the wide areas of application open to innovators of the future.

C. H. Dexter, a division of Dexter of the U.S. which invented teabag paper, devotes around 15 per cent of its personnel world-wide to technical research and development. "We have to get out of tradi-

NONWOVEN INDUSTRY—PRODUCTION BY END-USES

(In 1,000 tons)

	1970	1975	1978	1981	1982
Coverstock	3.0	24.2	38.2	46.7	57.8
Medical/Surgical	2.5	6.3	8.0	9.4	12.1
Bed and linen	0.4	2.6	4.4	3.0	4.6
Wiping cloths	6.4	2.0	10.7	12.3	13.6
Apparel	0.6	0.5	1.2	1.5	1.2
Filtration	3.2	4.8	7.1	7.4	8.1
Interlinings	10.0	9.2	9.6	12.5	12.7
Decorative substrates	7.7	6.6	12.4	14.3	14.3
Other	0.9	2.1	2.5	1.9	2.5
Civil engineering/Building	—	10.9	18.9	32.8	37.7
Upholstery/Carpet underlays	—	—	—	23.0	23.5
Abrasives/tea bags	1.1	22.1	25.7	13.9	15.2
Waddings and bulky items	—	—	—	2.8	2.8
Misc. and non identified	—	—	—	14.4	8.8
TOTAL	40.4	97.3	152.1	191.0	210

Source: EDANA

many influences, including water. Traditionally, cable has been wrapped in steel jackets but this process is expensive and not always adaptable to individual environments. Fire's cable wraps, made from non-woven fibres, are water-expandable, allowing water into their own water-tight traps.

There has been a very long take-off period for this product, according to a Fire executive in Holland. The company reckons that only one or two producers have entered this product area but competition is coming up fast.

Fire says that both the cable wrap and Coremat are now good commercial businesses, after long development periods. Many others are being developed he says.

"There must be new product applications in the pipeline, otherwise our existence is threatened," says Fire.

At Bondina UK, part of the Freudenberg group of West Germany, new product innovation is concentrated in the medical area and air filtration, among others. At the moment, glass fibre is used for most air filtration jobs, but the material is brittle and can break down and potentially cause inhalation problems. New uses for non-woven filtration systems are being investigated for the home such as cooker hoods and for industrial uses.

The main challenge for new, untried, products is not just developing them, however. Just as important is figuring out a way to get customers to try them. Most new non-wovens are replacing traditional materials, many of which are tied into a chain of purchasing orders, or even capital equipment investments.

Carla Rapoport

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Freudenberg widens its international network and sees great potential in China.

## Group expands operations in U.S. and Japan

MORE THAN 130 years ago, Carl Johann Freudenberg took over a small leather tannery in a valley at Weinheim, not far from West Germany's old university town of Heidelberg. Today, the Freudenberg business is still family-owned, but has diversified its production, expanded its interests to North and South America, Asia and South Africa, and built up sales to DM 2.6bn a year.

Nonwovens, produced with advanced technology, provide much of the impetus for the group's continuing international expansion.

Freudenberg recently brought on stream a new spunbonded nonwovens factory in North Carolina, a joint venture with Kendall of the U.S. It is also heavily involved in nonwovens manufacturing in the U.S. for more than 20 years through its Felton Corporation subsidiary.

### Co-operation

In Japan, too, Freudenberg is looking to further expansion in co-operation with its existing partner there, Dai Nippon. The companies have been discussing an operation to make spunbonded nonwovens. Co-operation with Japan goes back more than 20 years and Japanese businessmen and technicians have been coming frequently to the rustic setting of the West German group's headquarters.

Freudenberg's network of international nonwovens manufacture also includes operations in Canada, South Africa, Argentina, Spain and the UK, as well as a partnership venture in South Korea.

Herr Norbert Dahlström, who heads the nonwovens division, says the company is studying "blank spaces" on its world map, but cautiously points out that risks are involved in any such moves.

China figures in Freudenberg thoughts, but as a long-term prospect. "Ultimately, if one wants to participate in China, one will have to invest there in some way," says Herr Dahlström.

However, legal conditions, involving patents and divi-

dens, are still very uncertain, he points out. "There are thousands of unanswered questions. Even the Chinese themselves do not have all the answers. But we are keeping our ear close to the ground."

China is viewed not only as a great potential market for nonwovens—particularly if the Chinese begin to abandon uniform attire—but also as a possible base for exports.

Nonwovens have become an increasingly strong part of Freudenberg operations, which include shoe production and retailing, output of seals and gaskets, and other technical products, including printed circuits.

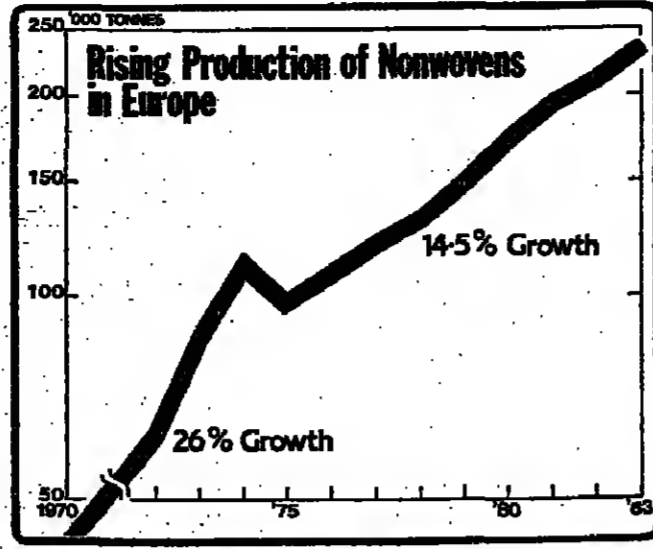
The sales revenue of DM 24.6bn from nonwovens last year made up 25 per cent of Freudenberg's total sales, compared with 24.5 per cent previously. Nonwovens sales grew by 12.6 per cent, nearly twice as much as the 7 per cent growth of total group revenue.

The importance of nonwovens is even greater when the DM 382.4m revenue of the Japanese and South Korean joint venture operations—in which Freudenberg has a minority stake—is taken into account.

Profits of the business are not disclosed, but the company says that nonwovens make a more than proportionate contribution to earnings.

About 30 per cent of the nonwovens sales revenue comes from interlinings for the garment industry, about 20 per cent from medical and hygiene products, 25 per cent from home textiles in a wide sense—including backing for automobile carpets—and 25 per cent from industrial nonwovens, such as cable insulators and filter materials.

The Freudenberg group plans to invest about DM 170m in all operations this year, up from about DM 134m last year. Investment will be concentrated in the U.S. and in West Germany, where projects include a DM 25m polypropylene spunbond process line at the Lustrav factory at Kaiserlautern.



A new staple fibre extrusion unit from James Mackie, Belfast, Northern Ireland

Herr Dahlström also points out that the company—which claims a pioneer role in the development of nonwovens—spends heavily on research and development. The proportion of sales revenue spent on R and D is about six times as much as that of the textile industry.

### Confident

Partly because of this emphasis on technological development, Herr Dahlström is confident in the face of such problems as potential overcapacity in some areas of the industry.

"We are in the process of creating monumental overcapacity in the hygiene market, because everybody in the U.S. and Europe is moving into it," he remarks. "Three or four manufacturers have established themselves in Europe in the past few years or are in the process of doing so." Paper companies, with their traditional products being displaced, are among those getting into nonwovens.

At the same time, the industry is facing a revolution in technology. "The technological trend is towards larger machines, wider and faster machines, with much higher output than previously, mainly in the disposable area. The capital cost is rocketing."

As a result of such pressures, many smaller businesses are likely to fall by the wayside, he believes.

Herr Dahlström disputes that nonwovens are operating everywhere in growth markets. Major sectors are already facing shrinking customer industries in some regions of the world. Other segments of the industry are, however, growing fast because they are replacing raw materials such as waxes and jute. "We have growth sec-

tors in roofing, geo-textiles, hygiene—disposable diapers—and in the medical field," he says.

Herr Dahlström believes that Freudenberg can face up to the problems ahead without any need to change the private nature of the company and open it up to investors from outside. Its own resources of capital and reserves make up some 35 per cent of its business sheet total, a healthy financial position in comparison with many companies.

Freudenberg is entirely owned by 150 family members and is supervised by a committee of family representatives. Herr Dahlström is one of six partners who are responsible for the day-to-day management and who are personally liable to the full extent of their own fortunes. He is one of three outsiders brought in by the family in recent years to strengthen the professional management.

John Davies

### END-USES FOR NONWOVENS

Breakdown by end-uses (per cent)

	1970	1978	1981	1982
Coverstock	19.8	25.1	24.5	25.7
Medical/surgical	6.2	5.3	4.9	5.8
Bed and table linen	1.0	2.9	2.0	2.2
Wiping cloths	14.8	7.0	6.4	6.6
Apparel	1.5	0.8	0.8	1.6
Filtration	7.9	4.7	3.9	3.9
Interlinings	24.8	6.3	6.6	6.0
Coating substrates	19.0	8.1	7.4	6.8
Decorations	2.2	1.0	0.9	1.2
Civil engineering/building		12.4	17.2	17.9
Upholstery carpet underlays			12.0	11.3
Abrasives/tea bags	2.8	17.0	7.3	7.3
Waddings and bulky items			1.5	0.7
Miscellaneous and non-identified		9.4	4.6	4.6

Source: EDANA

## Kendall of the U.S. boosts manufacturing base in Europe

### Strong place in health care

THE VARIED nature of the participants in the nonwoven industry worldwide finds one illustration in the U.S.-based company, Kendall, of Boston, Mass.

Originally a cotton producer, Kendall moved a long time ago into health care and numbers among its diverse product range highly sophisticated diagnostic monitoring equipment. Its strong position in this sector and its upmarket image were among the attractions for Colgate-Palmolive—then anxious to expand beyond its soap and toothpaste base—when it acquired the company in 1972.

Kendall's health care interests have also remained, however, a strong textiles orientation and it is one of the main suppliers of items such as surgical sponges, dressings, bandages, operating theatre gowns and other textiles to the U.S. medical market. It was one of the first companies to investigate the new technology of nonwovens and to develop a range of products.

Today it is one of the world's biggest producers of this product and a major supplier to America's other soap giant, Procter and Gamble (P and G), of coverstock—the fabric used in disposable diapers.

Unlike its main health care rival in the U.S., Johnson & Johnson, Kendall has traditionally not had a very high profile in Europe but over recent years it has sought to rectify this. The parent company decided in the mid-1970s that it was time to step up Kendall's presence in Europe, Latin America and Japan.

Major plants have been opened by the company to make nonwovens for coverstock in Belgium and for feminine hygiene products in the UK. "In the past few years we have sought to move the emphasis of manufacturing activities away from the U.S. in order to be sensitive to local needs," says Mr William Duncan, director of marketing for Europe. The company is now exporting back to the U.S., from its European plants.

Kendall's growth as a cover-



Mr William Duncan, European marketing director for Kendall, a major supplier of coverstock

stock supplier has been largely due to the very close links forged with P & G and in Europe it remains one of the company's principal suppliers. In the U.S., Colgate-Palmolive came out of disposable diapers after taking over Kendall to avoid a conflict of interest with P & G, but it makes and markets brands for Britain and France.

The company has invested heavily in Europe to make the new thermally bonded polypropylene coverstock which is expected to replace much of the resin-bonded material now on the market.

It is major technological developments of this sort, requiring large investment, which Kendall sees as eventually sorting out the weak from the strong in the European industry, where worries about overcapacity are now beginning to emerge.

Kendall is one of four big companies which are currently trying to get a study undertaken to establish an asset register. "Too many investment decisions have been taken without adequate information. What we want to

## Market breakthrough follows decreasing cost of nonwovens

### Swift move into the medical area

THE USE of nonwovens in hospitals around Europe is on the increase. The European distaste for disposables is slowly being outweighed by cost advantages and concern for the highest standard of hygiene possible.

For the companies supplying this sector, firm upward growth trends are appealing. So far, however, these increases have not provided a similar upward trend in profits as companies continue to scramble for market share in the expanding market for disposable medical supplies.

Medical nonwovens are worth about \$35m a year and represent about 8 per cent of the overall market for hospital drapes, gowns, sheets and other apparel. In America, sales of disposables have reached a hefty 87 per cent market share. But it has taken Europe about eight years to reach its current level of penetration and industry executives expect future growth to be more rapid.

"I think we will see an increase in sales of between 15 and 35 per cent per annum," says Mr Jean-Paul Francois, marketing manager for Dexter Europe, a division of Dexter of the U.S.

Two other major producers of medical nonwovens worldwide are Kimberly-Clark and Du Pont of the U.S. Du Pont has scored strong successes with its Tyvek surgical gowns. Du Pont also sponsored a clinical trial comparing infection rates in hospitals using its gowns as opposed to traditional fabrics. The disposables proved more effective.

### Margins

He says that the breakthrough is due to the decreasing cost of nonwovens, the increasing labour costs for laundering washable hospital linens, and the increasing psychological edge among young doctors who believe that disposables are more hygienic than traditional linen.

"Hospital nonwovens are one of the fastest growing parts of our business," says Mr Alan Grey, managing director (CK) of Bondina UK, part of the Freudenberg group of West Germany. The margins, he said cautiously, are "acceptable."

The swift move into the medical area has turned some items, like bed sheets, into commodities where high volumes can be guaranteed, but so can low margins. The companies specialising in this sector, as a

result, are looking to make their name in added-value products such as nonwoven fabrics which act and feel like linen as much as possible.

"We want the aesthetics of linen, we want to reproduce the drapability of linen, that's what everyone is targeting for. Bed sheets are a cut-throat market already, so is head-wear. There is nothing to be built in for higher value in these products," says Mr Francois.

To this end, Dexter has recently invested \$4m on updating its machinery at its factory in Brignod, France. According to Mr Joseph Day, president of Dexter, the group's medical nonwoven sales have tripled in the past three years and now represent about 25 per cent of the group's \$40m annual sales in Europe.

Nonwovens are also finding good growth in areas such as wipers to clean patients as well as surfaces, beds, dusters, overalls, mortuary cloths and shrouds. Further, non-woven wound dressing is finding increasing favour in hospitals.

Crowded as the field is, new competitors are eyeing the market. Bowater-Scott, a 50/50 UK joint venture between Bowater of the UK and Scott

Paper of the U.S., is currently testing products in the medical non-woven field. "We see this as an area of potential opportunity," provided we can convince the National Health Service of the value of disposables, says a Bowater-Scott executive.

The UK industry has a challenge ahead in terms of converting the NHS to disposables. "This task will be tackled from both the hygiene point of view and the arguments of laundry costs." The amount of capital tied up in laundry equipment is a barrier to using disposables, said one UK non-wovens executive. "But we see it only as a matter of time before Britain and the rest of Europe switches over to the widespread use seen in the U.S."

Carla Rapoport

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# KENDALL INTERNATIONAL

### MARKETING

Kendall is one of the fastest growing subsidiaries of Colgate-Palmolive, we market specialized industrial nonwovens. Hospital products for patient and critical care and a broad range of consumer products worldwide. We employ 13,000 people and are reaching for a billion dollars in sales.

### RESEARCH & DEVELOPMENT

Kendall believes in the importance of new products as well as the need for continual product improvement and the development of new uses for existing products to sustain its growth. Today the company's laboratories carry on a long tradition in their quest for superior nonwovens.

### MANUFACTURING

Kendall currently operates 26 plants. They produce nonwoven fabrics; bleach and blend cotton and man-made fibres; convert fabrics into packaged goods; and manufacture an ever increasing range of items for use in the demanding Hospital Product sector of the worlds market place.

KENDALL EUROPEAN HEADQUARTERS, 70 OXFORD STREET, LONDON W1A 1EN. TEL: 01-580 1824 TELEX: 8611862

## NONWOVENS VI



### Manufacturers place a strong emphasis on research work

PRODUCTION of nonwovens (above, left) at Lanter's plant in Bolton, Lancashire. The company is among the leaders in the industry in the UK and, along with most of the companies within the British Nonwovens Manufacturers' Association can boast of new and complex machinery as part of their

policy of continuous technological advancement. Other members of the association include Bonded Fibre Fabric of Bridgwater, Somerset; Bondina, of Greatland, Halifax, Yorkshire; Bowater-Scott, textile replacement division, of East London; Vernon-Carus of

Darwen, Lancs; C. H. Dexter of London; James R. Crompton, of Bury, Lancs; Johnson and Johnson of Slough, Bucks; Kimberly-Clark, of Maidstone, Kent; Reedbond, of London; and Wiggins Teape, Industrial paper division, of London. Another aspect of nonwoven production is seen above (centre), in Sweden

where Storalene nonwoven fabric forms the basis of roofing felts, manufactured by Mastak.

Tests have shown that products such as Macrolene roofing felts exhibit good elongation properties, water repellence, processability and better bitumen adhesion than,

for example, ordinary rag-felt material.

Above, right: the relatively easy installation in Stockholm, Sweden, of Icopal roofing results from the material's light weight and other properties, such as high tensile strength. Energy-saving: other examples for nonwoven products in the house-building industry include Tyvek "housewrap" which is claimed to cut heat loss through walls by 33 per cent.

The sponbonded olefin from Du Pont is used as a sheathing around buildings and has properties that reduce cold air infiltration but

pass moisture vapour to prevent condensation. The manufacturers claim that Tyvek can be quickly installed at relatively low labour cost: two men can put out 1,800 sq ft in less than two hours, using only a knife and staple gun.

Michael Wiltshire

Diverse applications range from the reinforcement of river banks to the strengthening of airfield runways

## Geotextiles now the biggest growth area

WHEN THE golfing authorities chose the Geneva Golf Club to host the world amateur women's championship two years ago, the club was delighted. Twenty-six national teams of three players each would be playing the course, an accolade for any club. Unfortunately, the groundsman had a problem which threatened the whole show. The bunker at the third hole drained particularly badly and others were difficult. If water lay in them during play it threatened the success of the tournament. Poor subsoil quality and an endemic course drainage problem had combined to cause intermingling of sand and subsoil.

### Solution

The answer to the problem was found in Du Pont's Typer, sponbonded polypropylene, a non-woven fibre sheet introduced in 1970 and widely used as a substrate or support membrane in construction projects, carpet backing, roof lining and packaging. To solve the problem the surface sand in the bunker was removed and a plastic pipe drain laid on a bed of Typer and chippings. This was covered by sheets of Typer and the sand replaced.

The players were delighted; plugging in the bunker was avoided. The club was also delighted: the modification did away with the need for costly sand renewal.

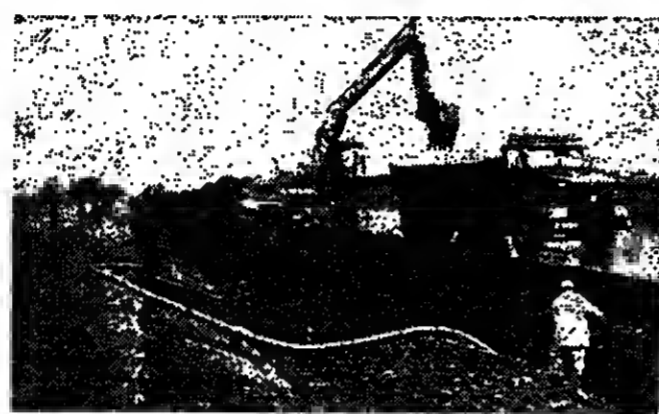
Further north, in Holland, the Government ran into problems where the Scheeldt, Ruine and Meuse flow into the sea through flooding. In 1953 the dikes failed and 1,800 people died.

To avoid another such tragedy a decision was taken to close four of the country's most valuable estuaries and by the time three had been shut it became evident that permanent flood protection was causing environmental problems.

The answer was to install a semipermeable dam system in which mattresses of Typer cover a large part of the seabed on both sides of barrier piers. This significantly increases the load-bearing capacity of subsoils.

The advantage of this sponbonded polypropylene is not just its weight it will hold but also its permeability. As in the golf club's bunker the permeability allows for filtration while holding layers of different materials in place.

As a result, this nonwoven, and others like it from different producers, are being increasingly used in the field of geotextiles. They reinforce air-



In Sweden (left) more than 800 km of Wavin drainage pipes were laid alongside roads within 18 months. The corrugated pre-pipes are jacketed with a protective fabric of Du Pont's Typer sponbonded polypropylene. In Dubai, ICI's Terram 70 was installed to help protect the sandstone bedrock of the massive Port Rashid project

port runways, sports fields, car parks, and support river banks and drainage systems.

In Europe Du Pont's Typer competes mainly against ICI's Terram and the French group, Rhone-Poulenc's Bidim. Output by all three companies is broadly comparable, though the American company has a higher proportion of its production in non-civil engineering activities, such as roofing and insulation than its two European-owned rivals.

The use of non-wovens in civil engineering originated in Europe and it remains the main centre for the product's development. In the U.S. woven fabrics have traditionally enjoyed a bigger share of the market.

The most significant reason for the product's growth has been the steady progression in the range and quality of applications. Initially, in the early 1970s, it was used mainly on construction sites to prevent vehicles churning up temporary road surfaces in wet conditions, and

was removed on completion of operations. The past 10 years have seen it become an integral part of the civil engineering and building process and its uses have extended from major projects to domestic housing. The problems it can solve have also become no less varied. These now include highway drainage, where geotextiles are often buried under topsoil on roadside verges and over drainage stones. Previously to deal adequately with the volume of

water coming off road surfaces, it was necessary to place the drainage stones on the surface. The danger here was that the stones could be propelled on to the carriageway by grasscutting machines or cars pulling off the road.

Other applications are docks and harbours, where non-wovens can help to prevent loss of ballast from under concrete slabs; unsurfaced and surfaced roads, including farm roads and even garden paths. According to Mr I. R. Clough, commercial

manager of ICI Fibres' geotextiles group, these applications where geotextiles form part of the overall product specification now account for as much as 80-90 per cent of material used.

Trends now taking place within the geotextiles sector include a move to lightweight products as manufacturers find ways of increasing the performance of their fabrics at lower weights.

### New areas

ICI Fibres itself is using this move to lighter weights to back a new push into other product areas, such as roofing, where it has a specialist flat-roofing product Roofstat, used in conjunction with polystyrene insulation blocks in buildings in very warm and very cold countries.

Fibre usage has yet to take on a common pattern. Du Pont's Typer is a polypropylene, while ICI uses a 70 per cent polypropylene 30 per cent polyethylene combination. Though it is vulnerable to ultraviolet degradation, this is not a major problem in a product which is likely to be buried, and it has the advantage of being chemically inert and therefore resistant to rotting and ageing.

Rhone-Poulenc, however, has committed itself to polyester, which it claims has advantages over polypropylene in strength, resistance to temperature and light and in other properties.

### Higher production

Within western Europe production of nonwovens for civil engineering and building purposes, which to all intents is the geotextiles field, has risen from some 10,900 tonnes in 1975 to 37,700 tonnes in 1982. This is now the second most important end use of nonwovens (after coverstock) and accounts for 17.9 per cent of total usage.

Nonwoven geotextiles have been an important export, especially to Eastern Europe and the Middle East, in this time and the above average growth in overseas sales is expected to continue.

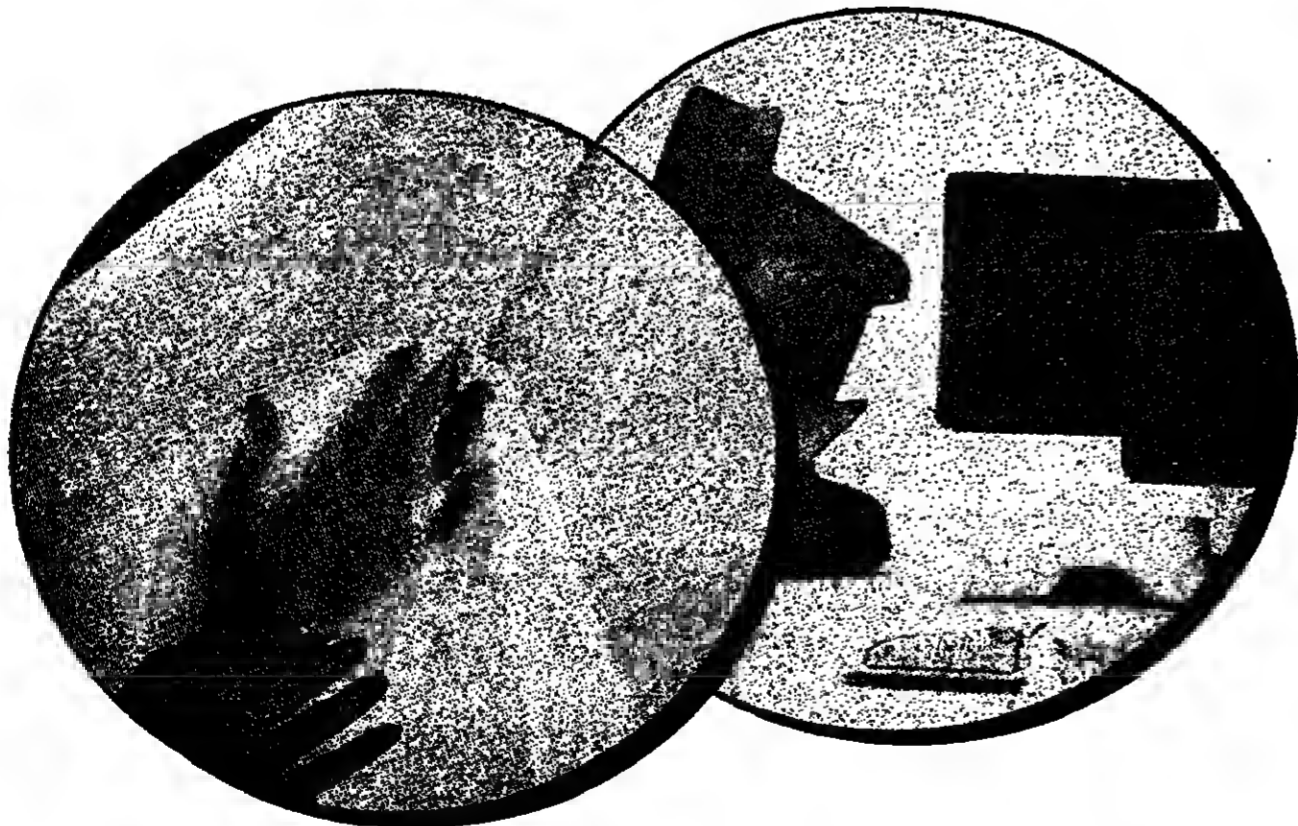
Edams believes that although there may be some slow-down in use of geotextiles for the largest engineering undertakings as government funding runs down, this should be counter-balanced by an increase in the use of the products in smaller scale construction and repair work.

Anthony Moreton and Rhys David

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## Fairs and Exhibitions in Geneva

### 1984

- April 6 - 15 12th International Exhibition of Inventions and New Techniques with Spemac - International exhibition of special technologies
- May 5 International Car Model Exchange
- May 9 - 12 Hospitec-Medelec 84 - International exhibition of the hospital and medical industries - with conferences
- May 22 - 25 Sitev 84 - 11th International exhibition for the suppliers of the vehicle industry - with conferences
- July 15 - 18 "Fossil Fuels of Europe" - Conference and exhibition of the American Association of Petroleum Geologists
- Sept. 4 - 7 Burexpo 84 - Exhibition for Informatics, Bureaucratics and Office Equipment
- Oct. 2 - 5 Emergency 84 - International congress and exhibition for emergency, disaster preparedness and relief
- Oct. 2 - 5 Medic-Air 84 - International medical aviation exhibition - with conferences
- Oct. 10 - 14 Art & Design Expo - International art and design exhibition
- Oct. 12 - 17 Edexpo 84 - 1st International Forum for the World of Education
- Oct. 17 - 19 Esso 84 - 2nd Congress of the European Society of Surgical Oncology - with exhibition
- Nov. 7 - 18 32nd Ideal Home Exhibition
- Nov. 28 - December 2 12th Geneva Antiques Fair

### 1985

- Feb. 1 - 10 7th International Boat Show
- March 7 - 17 55th International Motor Show
- April 19 - 28 13th International Exhibition of Inventions and New Techniques with Spemac - International exhibition of special technologies

(subject to alterations)

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